

**PH HORN PH**



# **MODULARE LANGDREHTECHNIK**

MODULAR TECHNOLOGY FOR  
SWISS TYPE MACHINES

**2020/2021**



# Inhaltsverzeichnis

Table of contents  
Table des matières.



<b>Beschreibung / Description</b>	<b>Seite / Page</b>
<b>Rundlauf toleranzen</b> Runout tolerances	<b>1.2</b>
<b>Gebrauch und Wartung der WFB-Schnittstelle</b> Handling and maintenance for WFB connection	<b>1.3</b>
<b>Produktvorteile der WFB-Schnittstelle</b> Product advantages of WFB connection	<b>1.4</b>
<b>WFB Produktübersicht (Auszug)</b> WFB Product overview	<b>1.8</b>
<b>Modularer Gewindewirbelkopf</b> Thread whirling head modular	<b>1.10</b>
<b>CITIZEN</b>	<b>2</b>
<b>DMG MORI</b>	<b>3</b>
<b>HANWHA</b>	<b>4</b>
<b>MAIER</b>	<b>5</b>
<b>STAR</b>	<b>6</b>
<b>TORNOS</b>	<b>7</b>
<b>TSUGAMI</b>	<b>8</b>
<b>WFB statische Halter WFE/SHT</b> WFB static holders WFE/SHT	<b>9</b>
<b>WF Micro – Modulare Drehhalter</b> WF-Micro modular turning holders	<b>10</b>
<b>WFB – Adapter und Zubehör</b> WFB – adapter and accessories	<b>11</b>

WG = Warengruppe  
Article group  
Groupe de marchandise

WG 11 = \_\_\_\_\_

WG 35 = \_\_\_\_\_

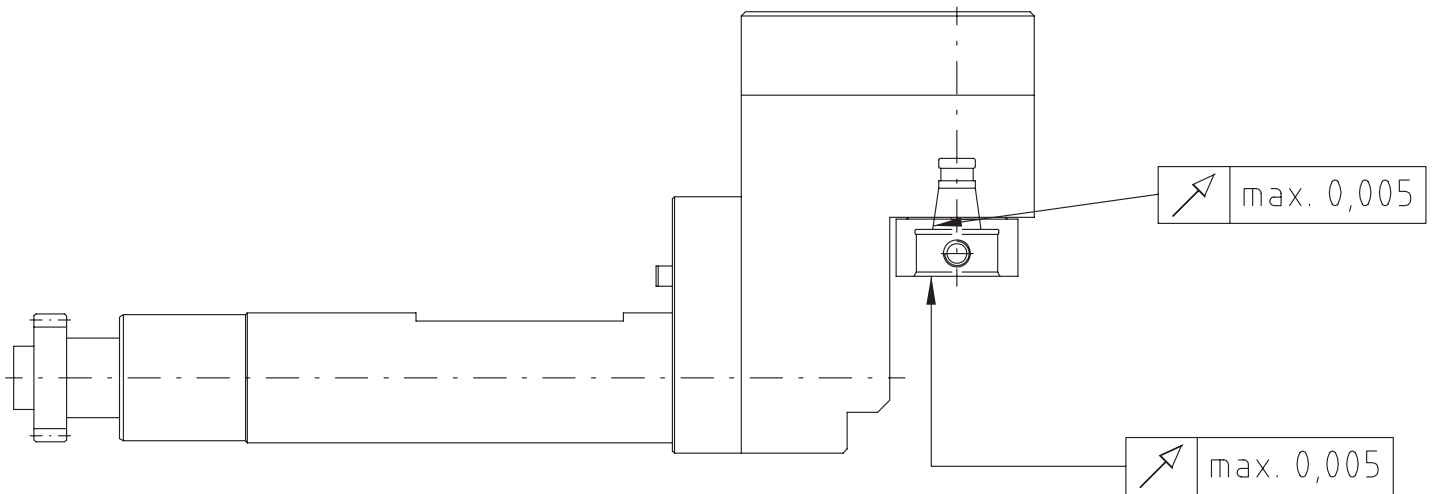
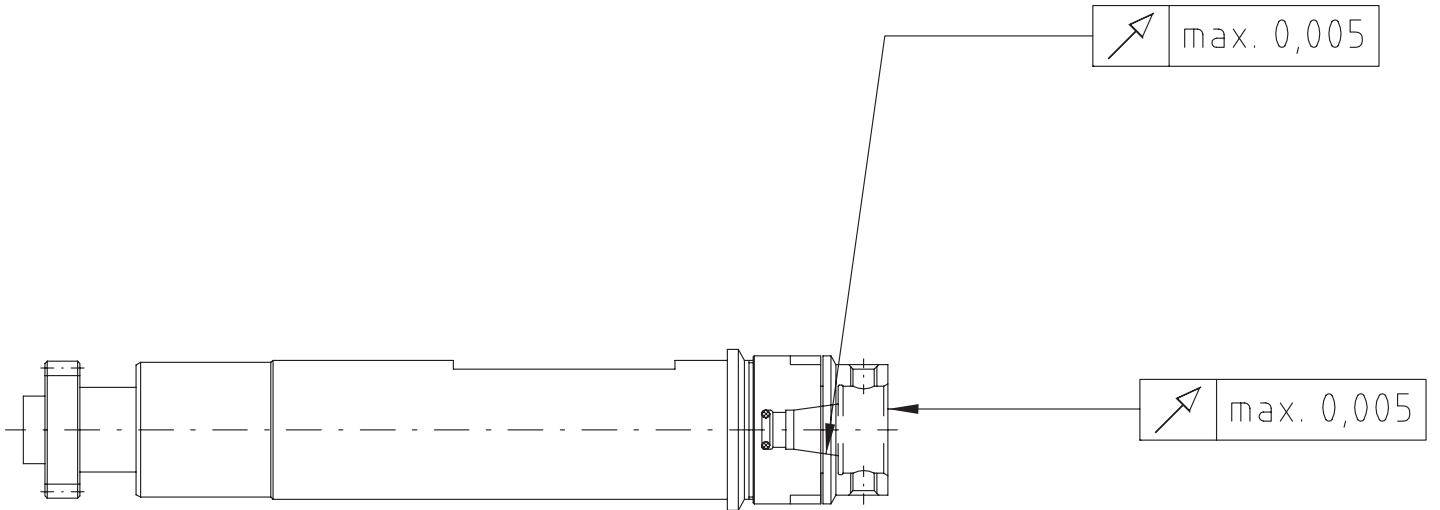
WG 40 = \_\_\_\_\_

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# Rundlauftoleranzen

Runout tolerances  
Tolérance de rotation



# Gebrauch und Wartung der WFB-Schnittstelle

Handling and maintenance for WFB connection  
Manutention et maintenance pour WFB connexion



## Hinweis zur Befestigung

Zunächst einen Kegelgewindestift anziehen, dabei 1-2 mal lösen und wieder anziehen. Dadurch wird eine optimale Positionierung der Bauteile erreicht. Der 2. Kegelgewindestift wird nun ebenfalls (wie oben angeführt) angezogen. Empfohlene Drehmomente entnehmen Sie der unteren Tabelle.

## Advice for fixing

First tighten one threaded taper pin, in doing so 1 or 2 times unscrew and tighten again. Thereby you get an optimum positioning of the components. The second threaded taper pin you will tighten with the same method. Recommended locking torque see in the lower table.

## Pflege und Wartung

Die Oberflächen der Planflächen, der Kegelbohrung und Kegelzapfen sind vor Gebrauch zu reinigen und mit einem Öl-Schmierfilm zu versehen. Um eine optimale Befestigung und Lösbarkeit der Kegelgewindestifte zu erreichen, wird empfohlen die Kegelgewindestifte mit z.B. Molykote 1000 oder einer ähnlichen Heiss-Schraubenpaste zu behandeln.

## Support and maintenance

The surface of the face, the cone drill and cone pin must be cleaning and lubricate with oil before using. To reach an optimum fixing and resolvability of the threaded taper pins, are recommended to use for example Molykote 1000 or something similar.

### Empfohlene Anzugsdrehmomente

Recommended locking torque / Retenue couple

Größe	Kegelgewindestifte	Anzugs-Drehmoment
WFB20-12	M6 x 0,75 / Torx 15 Plus	4 Nm
WFB20-12	M6 x 1 / Torx T15	4 Nm
WFB24-16	M8 x 1 / Torx T25	10 Nm
WFB 32-20	M10 x 1	20 Nm

### Empfohlene Anzugsdrehmomente beim Einsatz von Kontrolldornen

Recommended locking torque when running test arbors

Retenue couple à l'usage de Mandrins de contrôle

Größe	Kegelgewindestifte	Anzugs-Drehmoment
WFB20-12	M6 x 0,75 / Torx 15 Plus	2 Nm
WFB20-12	M6 x 1 / Torx T15	2 Nm
WFB24-16	M8 x 1 / Torx T25	5 Nm
WFB 32-20	M10 x 1	10 Nm

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# Produkt-Vorteile der WFB-Schnittstelle

**Präzise**

Die Kegel/Plananlage mit zylindrischer Abstützung gewährleistet höchste Genauigkeit ( $2\mu$ ) und absoluten Form-schluß.

**Flexibel**

Spannzange, Weldon, Schrumpffutter, um nur die wichtigsten zu nennen, können alle in einen Grundhalter eingesetzt werden. Die Handhabung ist einfach und praxisgerecht.

**Kompakt**

Der extrem kompakte Aufbau gewährleistet eine optimale Kraftübertragung und Systemsteifigkeit. Daraus resultieren höhere Werkstückgenauigkeiten und verbesserte Produktivität.

**Orientierte Schneidenlage**

Auf Umschlag  $< 10 \mu$

**Reinigung**

Einfach, da überall leicht zugänglich.

# Produkt-Vorteile der WFB-Schnittstelle



Plananlage

## **Wirtschaftlich**

Sie benötigen weniger aufwändige, teure Sonderwerkzeughalter, die Werkzeugstandzeiten verlängern sich erheblich. Die Folge ist die deutliche Minimierung Ihrer Gesamtwerkzeugkosten. Mit dem WFB-System helfen wir Ihnen Ihre Drehmaschine künftig wirklich wirtschaftlich einzusetzen, und teure Nebenzeiten einzusparen. Das neue modulare WFB-System von W&F eröffnet Ihnen hinsichtlich der Präzision und der Flexibilität völlig neue Dimensionen in der Fertigungstechnik.

## **Spannmechanismus**

Äußerst günstig durch 2 Kegelgewindestifte.

## **Schnell**

Durch den Einsatz von Werkzeugen, die parallel zur Maschinenlaufzeit voreingestellt werden, reduziert sich die Maschinenrüstzeit nahezu auf Null. Teure Maschinenstillstandzeiten werden vermieden.

## **Universell**

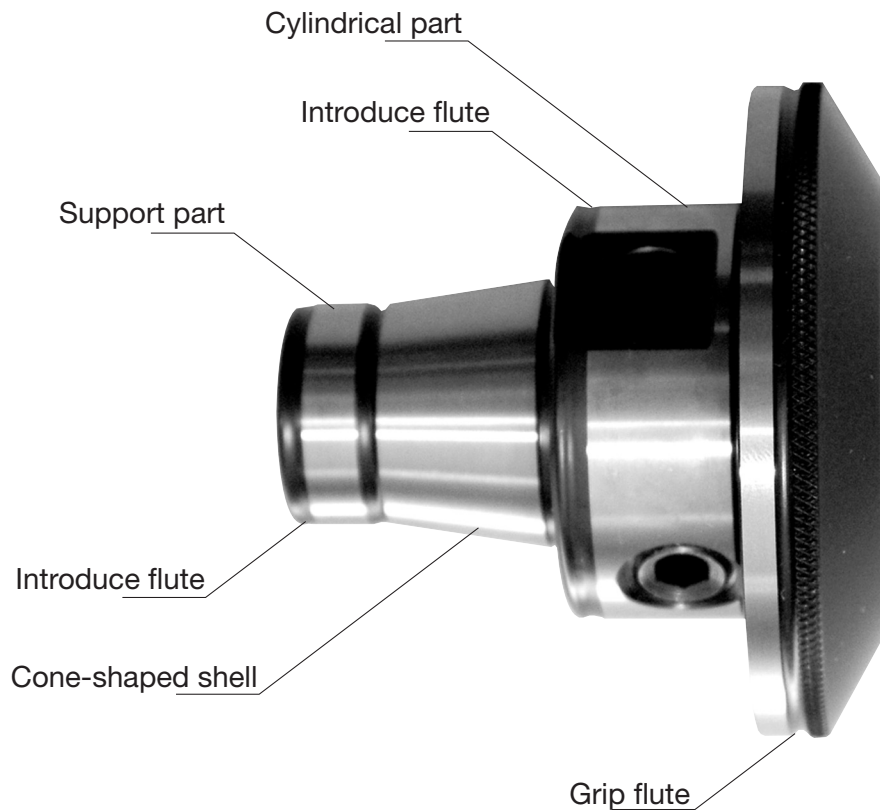
Sowohl für angetriebene als auch für feststehende Werkzeuge, sowie auf Fräsmaschinen und BAZ einsetzbar.

## **Schrumpfen**

Nach vorne und nach innen möglich.



# Product advantages of WFB connection



## Precise

The taper/planned assets with cylindrical support guarantees highest precision ( $2\mu$ ) and completely form fit.

## Flexibel

Collet, Weldon, schrink fit holder, etc., can be used in all master shanks. Easy and safe to handle. Collet, Weldon, schrink fit holder, etc., can be used in all master shanks. Easy and safe to handle.

## Compact

The extrem compact construction guarantees an optimum load transmission and system rigidity. Out of it follow workpiece in higher precision and revised productivity.

## Optimized position of cutting edge

Turnover  $< 10 \mu$

## Cleaning

Simple because of good accessible.



# Product advantages of WFB connection



Planned assets

## **Economical**

You need less expensive special tool holders and the tool life will be extended. So you get a minimization of complete costs of tools. With the WFB-system we help you to use your turning machine profitable in the future and to save expensive non-productive time. The new modular WFB-system from W&F enable you with precision and flexibility new dimensions in the production technology.

## **Gripping mechanism**

Exceedingly favorable through 2 threaded taper pins.

## **Quick**

Pre-setting of tools can be effected out of the machine. Setting-up time will be nearly zero. Expensive machine dead time will be avoided.

## **Universal**

Applicable in driven and static tool holder, as well as on milling machine and machining center.

## **Shrinking**

Forward and inward possible.

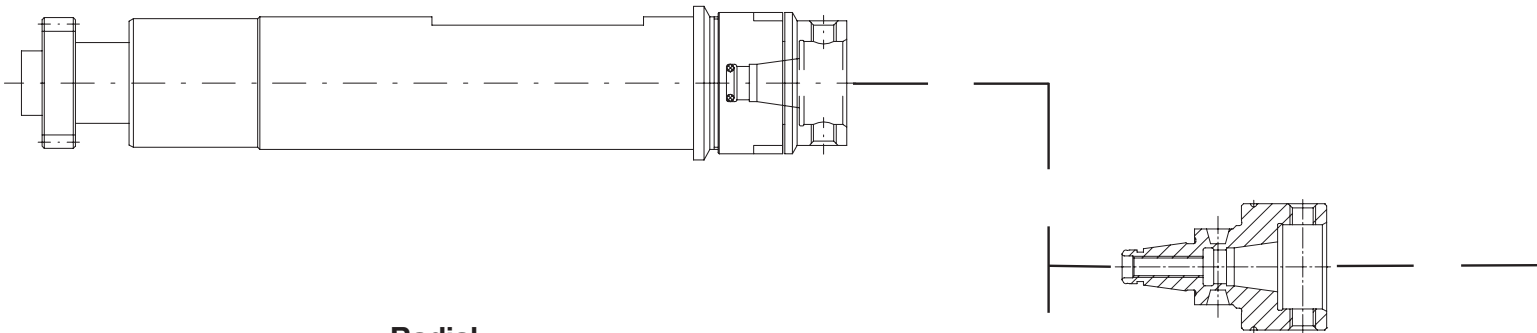


# WFB - Produktübersicht (Auszug)

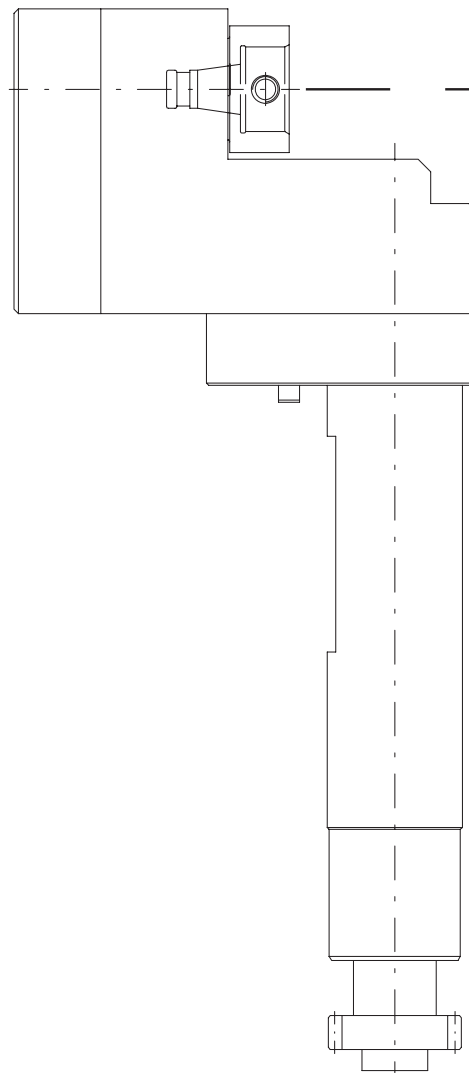
WFB - Product overview  
WFB - Vue d'ensemble de produit

**WFB - Aggregate**  
WFB - Aggregates  
WFB - Agrégats

**Axial**



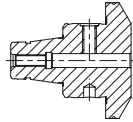
**Radial**



**WFB - Verlängerungen**  
WFB - Extensions  
WFB - Prolongations

# WFB - Produktübersicht (Auszug)

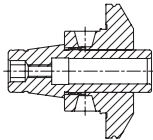
WFB - Product overview  
WFB - Vue d'ensemble de produit



## WFB - Weldon / Whistle Notch für Zylinderschäfte DIN 1835 B / E

WFB - Weldon / Whistle Notch for parallel shanks

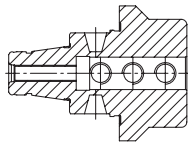
WFB - Weldon / Whistle Notch pour queues cylindriques



## WFB - Schrumpffutter

WFB - Shrink fit chucks

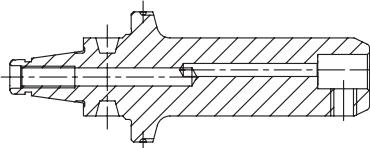
WFB - Mandrins de frettage



## WFB - Bohrstangenhalter

WFB - Boring bar holder

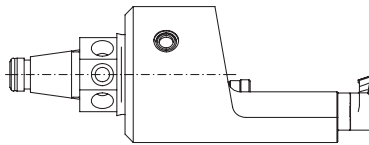
WFB - Porte-outil pour barres d'alésage



## WFB - Klemhalter W-T HORN Supermini® mit IKZ

WFB - Toolholder W-T HORN Supermini® with internal cooling system

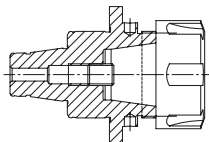
WFB - Porte-outil W-T HORN Supermini® avec arrosage central



## WFB - Klemhalter W-T HORN Mini mit IKZ

WFB - Toolholder W-T HORN Mini with internal cooling system

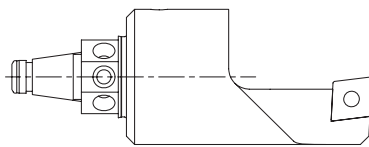
WFB - Porte-outil W-T HORN Mini avec arrosage central



## WFB - Spannzangenfutter 8° Typ ER

WFB - Collet chucks 8° type ER

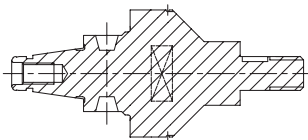
WFB - Mandrins porte-pinces 8° type ER



## WFB - Drehhalter W-T mit IKZ

WFB - Turning tool holder W-T with internal cooling system

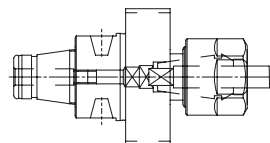
WFB - Rotatif porte-outil W-T avec arrosage central



## WFB - Sägeblattaufnahmen

WFB - Tool holders for saw blade

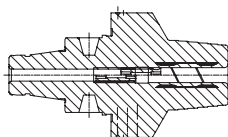
WFB - Mandrins pour lame de scie



## WFB - Softsynchro® mit IKZ

WFB - Softsynchro® with internal cooling system

WFB - Softsynchro® avec arrosage central



## WFB - Hydro-Dehnspannfutter

WFB - Hydraulic expansion chuck

WFB - Mandrin hydraulique

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## Modularer Wirbelkopf

Stillstandszeiten senken durch modulare Gewindewirbelköpfe

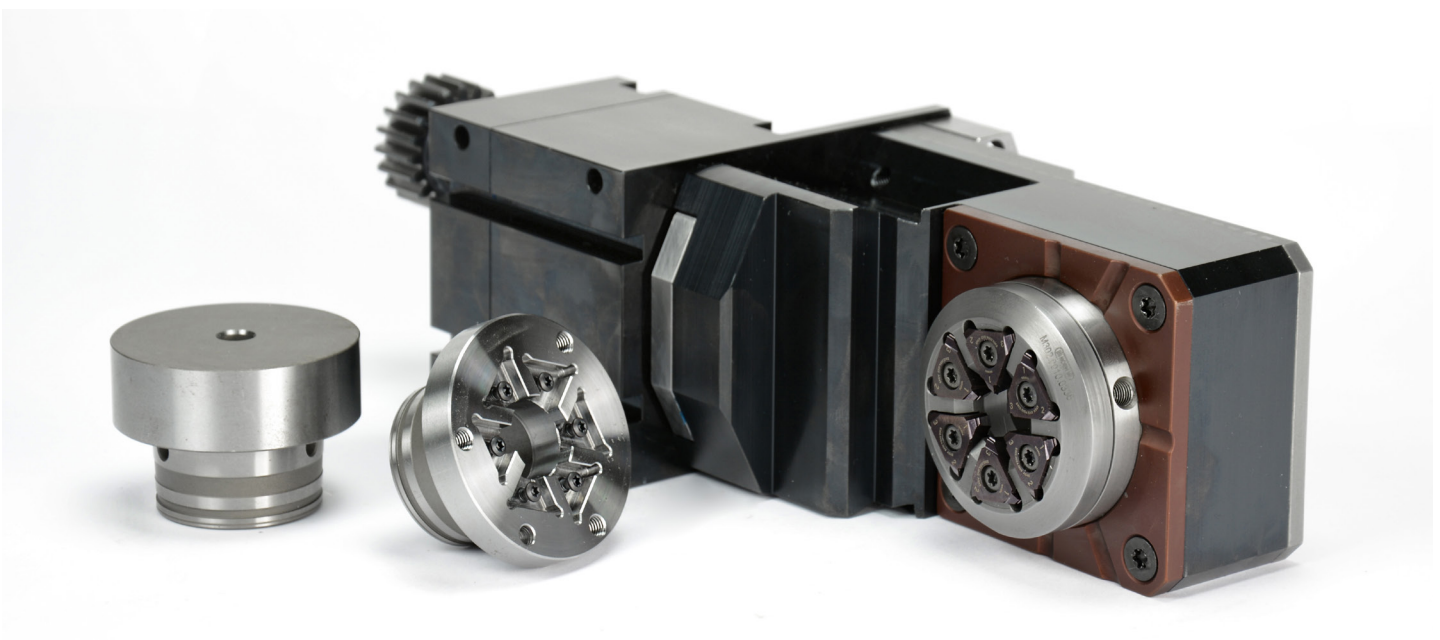


Der Ein- und Ausbau des Wirbelapparates sowie das damit verbundene Ausrichten, gehört durch den Einsatz modularer Gewindewirbeleinheiten der Vergangenheit an. Durch die hohe Rundlaufgenauigkeit der Schnittstelle und der gleichmäßigen Abnutzung der Schneidplatten, kann eine Standzeiterhöhung von bis zu 300% erreicht werden.

- Wechseln des Einsatzes: < 1 min
- Rundlaufgenauigkeit: < 3 $\mu$
- Wechselwiederholgenauigkeit: < 2 $\mu$
- Voreinstellbar außerhalb der Maschine
- Verfügbar für alle gängigen Langdrehmaschinen

Durch das Zusammenspiel von Kegel-Plananlage mit Zylindrischem Bund, erreichen wir nicht nur höchste Genauigkeit in der Schnittstelle, sondern auch ein bedienerfreundliches Wechseln der Einsätze mit lediglich drei Schrauben.

Unser Rohlingsprinzip bietet höchste Flexibilität und die Möglichkeit, Ihre benötigten bzw. bevorzugten Wendeschneidplatten zu verwenden. Die entsprechenden Plattensitze können vom Wendepplattenhersteller oder auch von Ihnen selbst in den Rohling eingebracht werden.



# Modular thread whirling head

Reduce machine downtimes by modular thread whirling heads

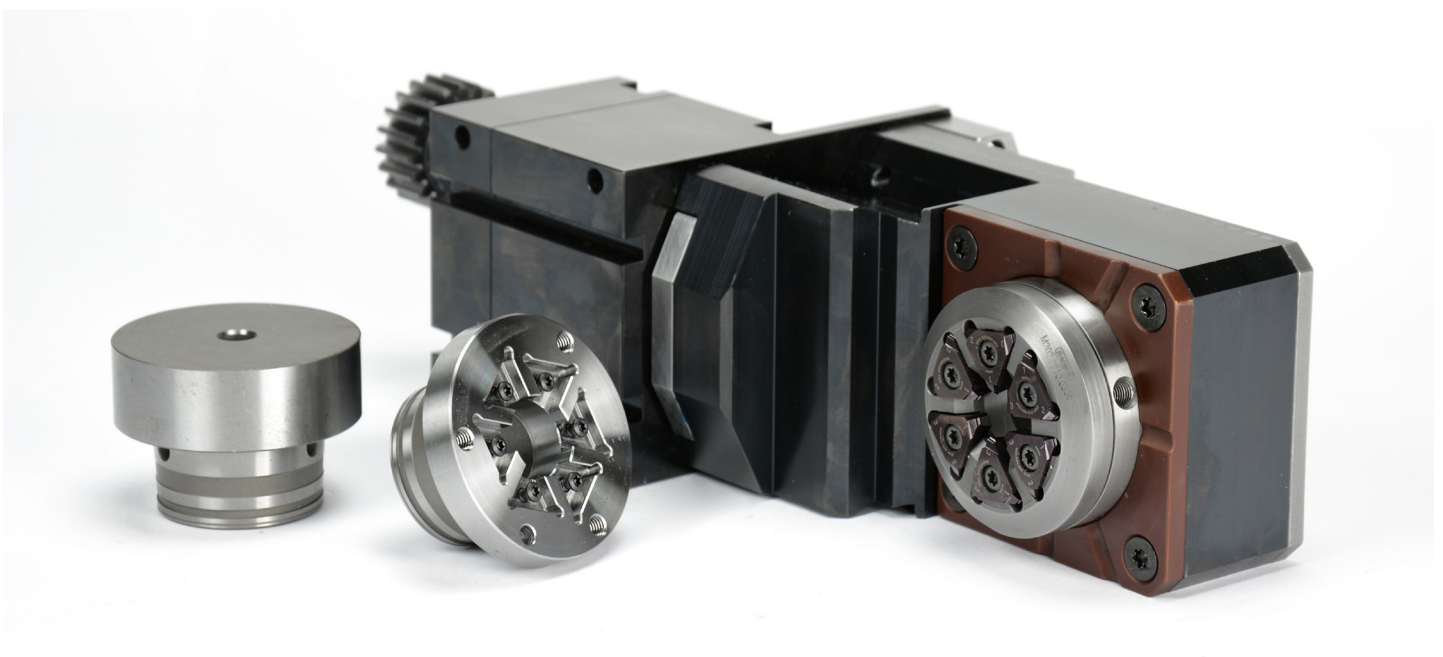


By the use of the modular thread whirling head, the mounting and dismounting of the unit out of the machine and the steady adjustment, are now things of the past. Though the high rotation accuracy of the interface and the even wear of the cutting edges, tool endurance can be increased up to 300%.

- change of the insert: < 1 min
- true running accuracy: < 3 $\mu$
- change accuracy: < 2 $\mu$
- pre adjustable outside of the machine
- available for common swiss-type machines

Through the interplay of cone-shaped shell and planned assets with cylindrical support, we not only reach highest preciseness in the interface it self, but also an user-friendly changing of the inserts with only three screws

Our “blanks-principle“ enables highest flexibility and the opportunity to use your needed respectively your preferred insert tips. The according insert seats can be made by the manufacturer of the insert tips, or by your self as well.





Modulare Aggregatetechnik

Citizen

WF  
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Werkzeugtechnik



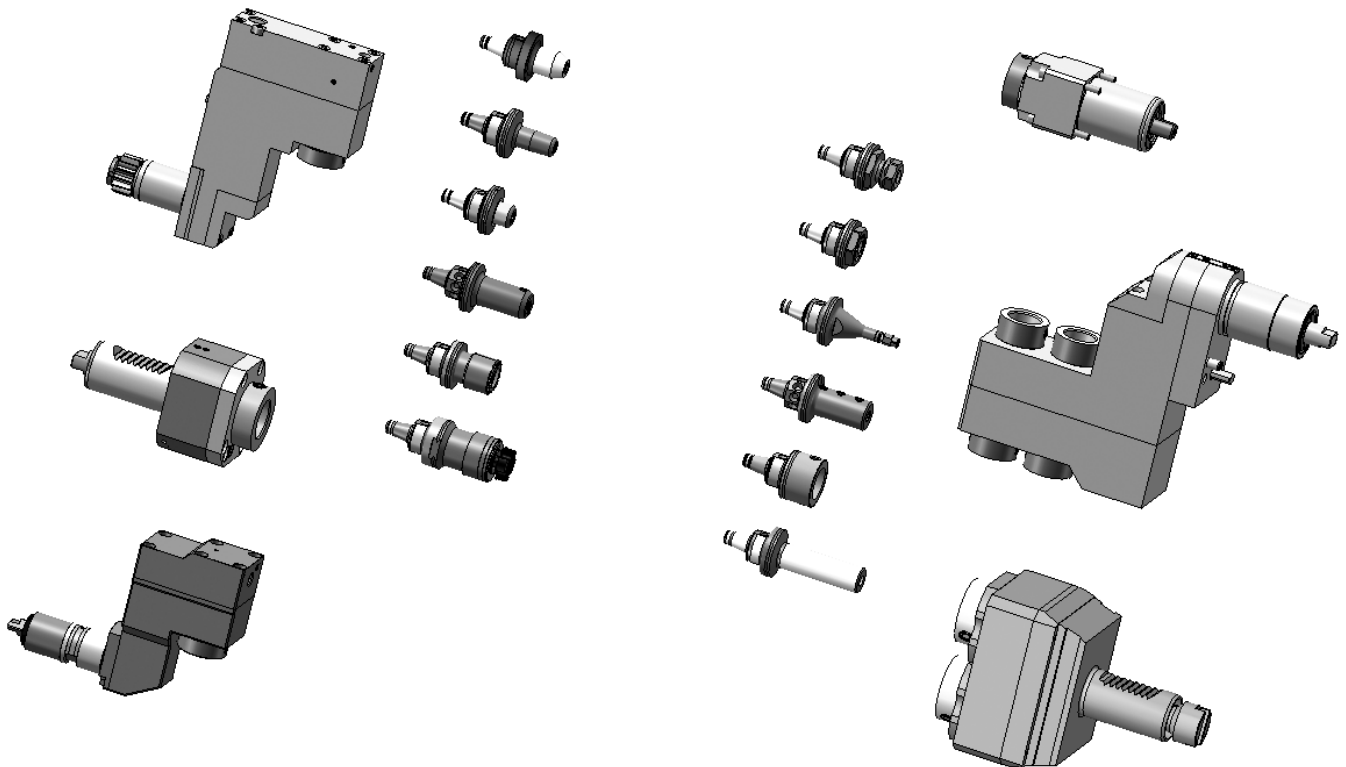
Katalog  
CI-02

# W&F

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## WFB-Adapterpool

Indications for the customer



Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindeldrehen ein durchgängiges modulares Werkzeugsystem einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.



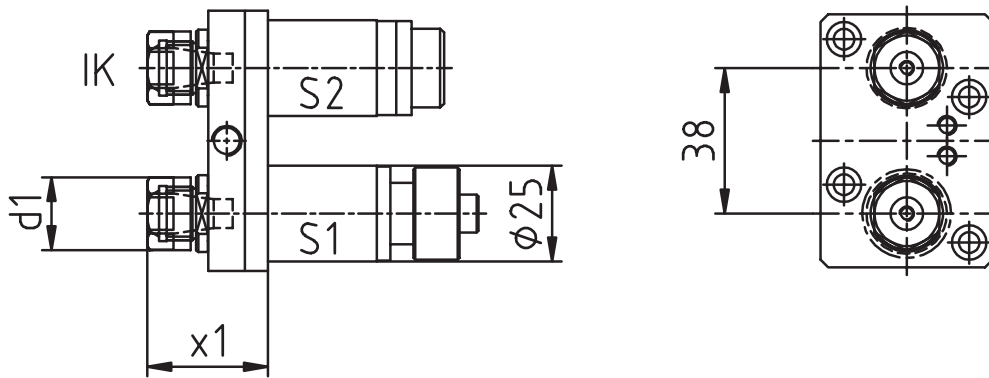
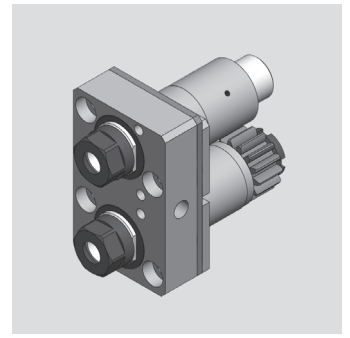
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35

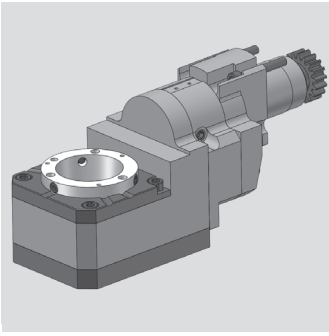


[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
19	36,5	ER11	4*	6.000*	1:1*	x			MPU.Z25.E11.MA0.A20
19	36,5	ER11	4*	6.000*	1:1*	x	x	80	MPU.Z25.E11.ME0.A20

Passend für Maschine: A20  
 suitable machines:  
 approprié pour la machine:

Ähnlich OEM Nr.  
 similar to OEM no.  
 semblable au OEM nombre

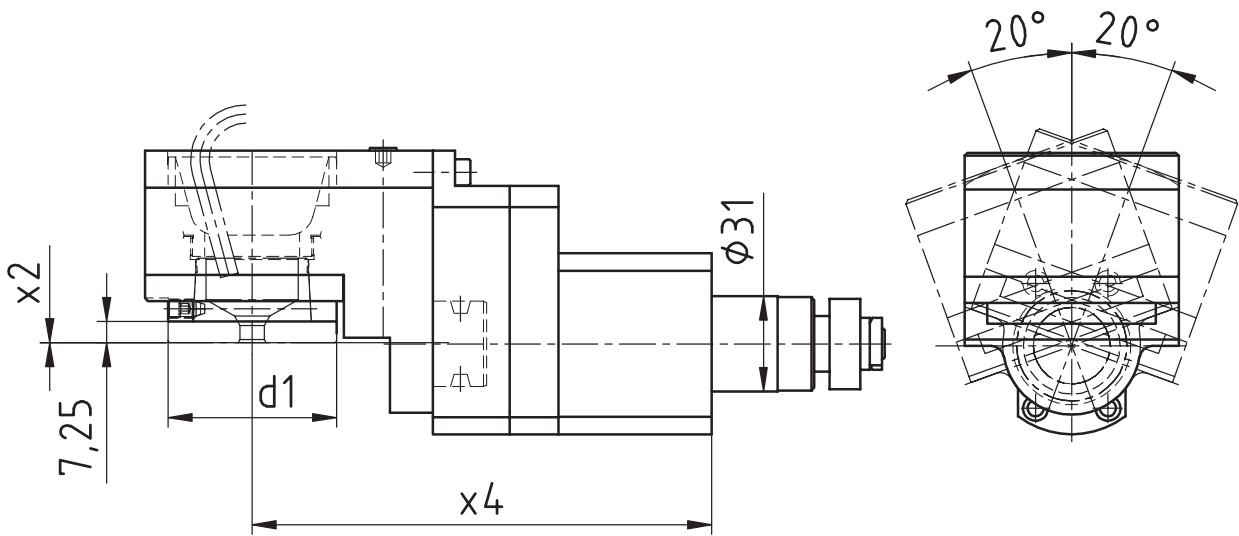
\* S1: 4 Nm/6.000 rpm/i=1:1  
 S2: 2 Nm/9.660 rpm/i=1:1,61



# Citizen

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4							
54	0	150	WFW 50	16	6.000	1:1			MPU.LSW.101.M0800.A20

**Passend für Maschine:** A20  
 suitable machines:  
 approprié pour la machine:

**Ähnlich OEM Nr.**  
 similar to OEM no.  
 semblable au OEM nombre

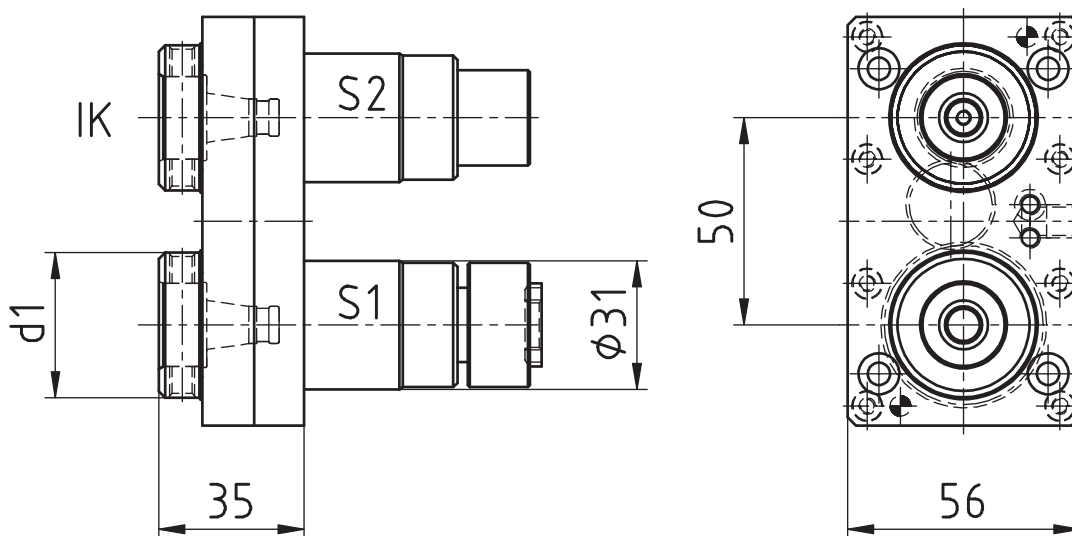
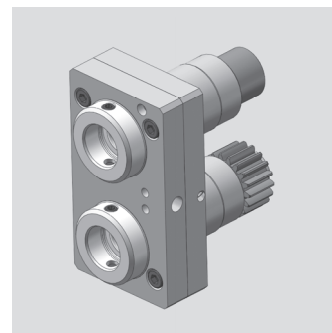
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
35	35	WFB 20-12	6*	6.000*	1:1*	x			MPU.Z31.B20.MA0.A32
35	35	WFB 20-12	6*	6.000*	1:1*	x	x	80	MPU.Z31.B20.ME0.A32

Passend für Maschine: A32  
 suitable machines:  
 approprié pour la machine:

Ähnlich OEM Nr.  
 similar to OEM no.  
 semblable au OEM nombre

\* S1: 6 Nm/6.000 rpm/i=1:1  
 S2: 3 Nm/10.260 rpm/i=1:1,71



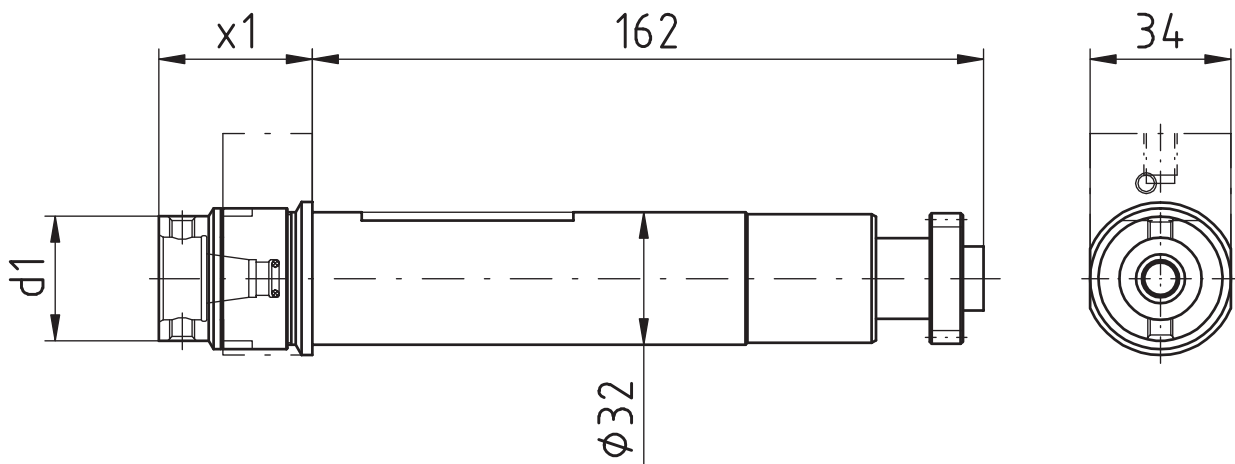
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	37	WFB 20-12	10	6.000	1:1				MPU.GSC.507.AA0.B20
30	37	WFB 20-12	10	6.000	1:1	x	x	80	MPU.GSC.507.AE0.B20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	L20E2M8	L20E-IX	L20X	M232-III	M332-III
	L20E2M10	L20V	M220-III	M320-III	M332-V
	L20E1M12	L20VIII	M220-V	M320-V	M32-4M5/M8

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	GSC-1010
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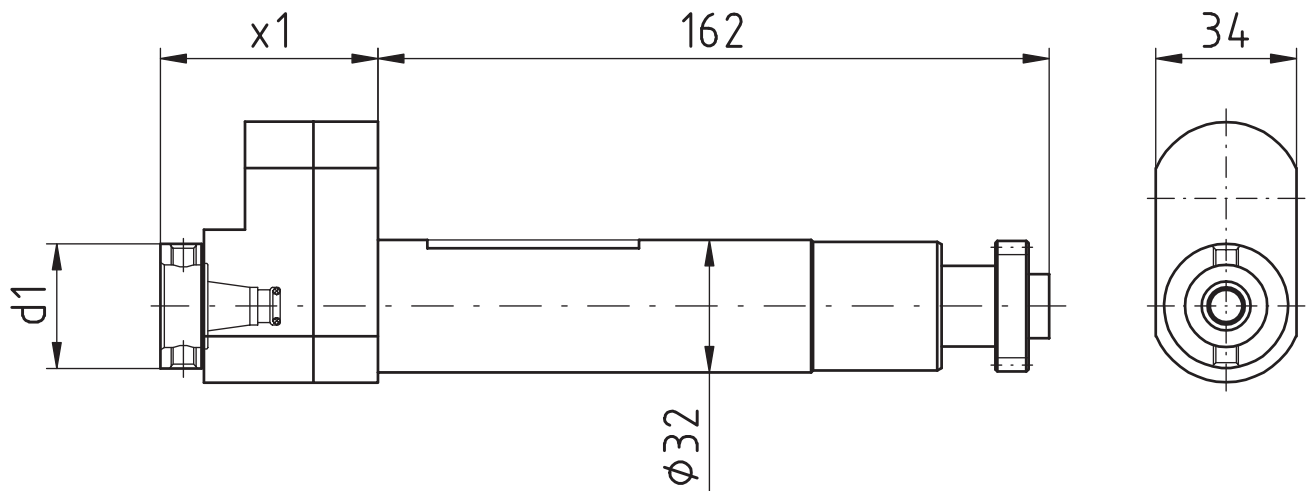
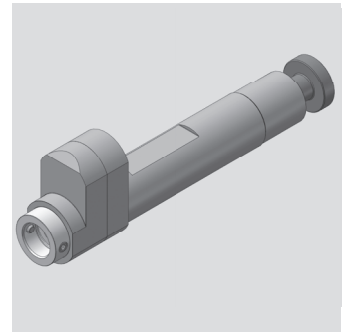
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

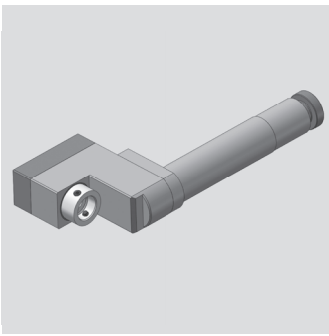
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	52,5	WFB 20-12	3	18.000	1:3				MPU.GSC.510.AA0.B20

<b>Passend für Maschine:</b>	L20E2M8	L20E-IX	L20X	M232-III	M332-III
suitable machines:	L20E2M10	L20V	M220-III	M320-III	M332-V
approprié pour la machine:	L20E1M12	L20VIII	M220-V	M320-V	M32-4M5/M8

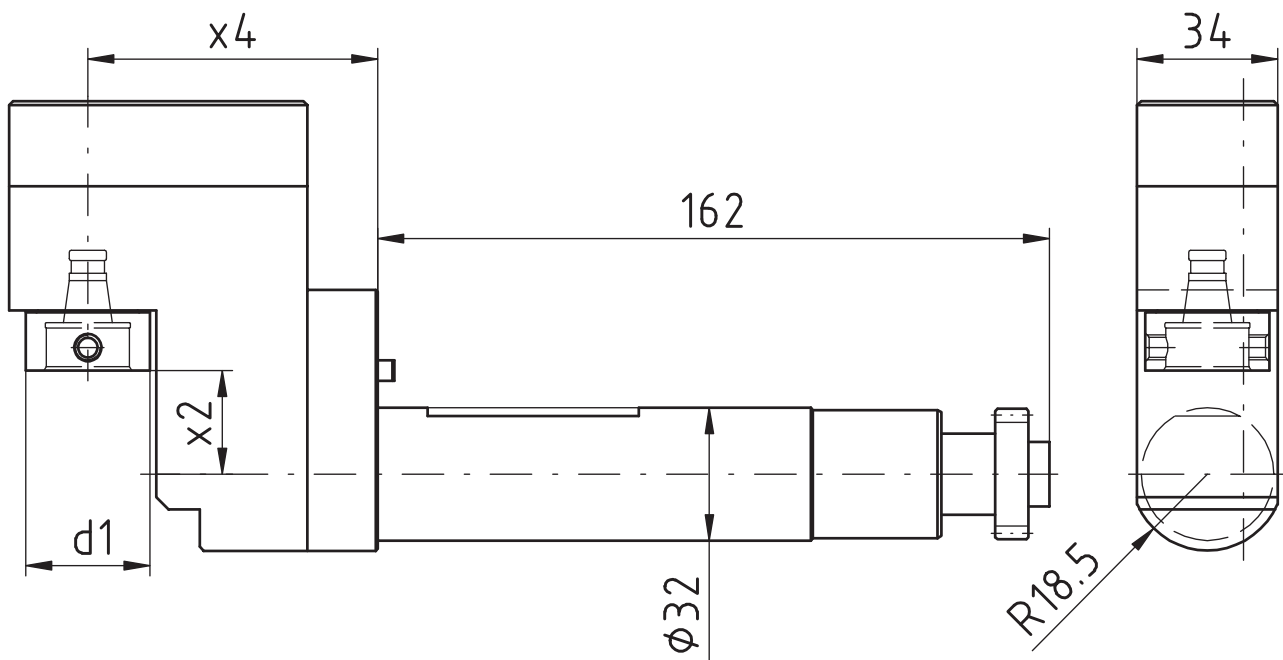
<b>Ähnlich OEM Nr.</b>	GSC-1010
similar to OEM no.	
semblable au OEM nombre	



# Citizen

**Radial-Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	4	12.000	1:2			MPU.GSE.607.XA0.B20

Passend für Maschine: suitable machines: approprié pour la machine:	L20E2M8	L20E-IX	L20X	M232-III	M332-III
	L20E2M10	L20V	M220-III	M320-III	M332-V
	L20E1M12	L20VIII	M220-V	M320-V	M32-4M5/M8

Ähnlich OEM Nr. similar to OEM no. semblable au OEM nombre	GSE-306

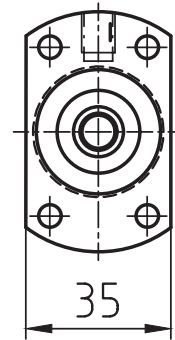
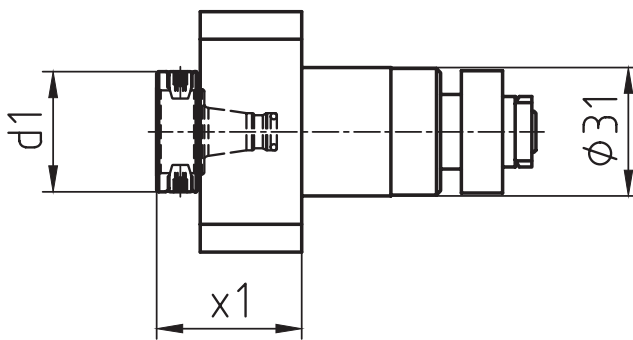
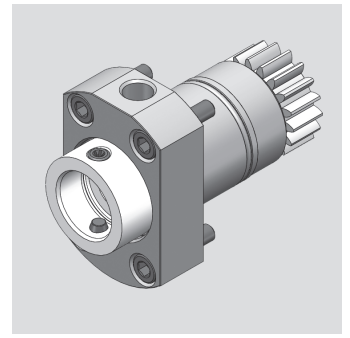
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

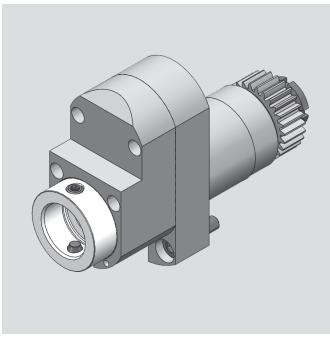
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
30	35	WFB 20-12	8	6.000	1:1				MPU.Z31.B20.GSC.1310
30	27	WFB 20-12	8	6.000	1:1	x	x	80	MPU.Z31.B20.GSC.1310IK

Passend für Maschine: suitable machines: approprié pour la machine:	A20-3F7N	L20E-2M8	L32-1M12	M232-V	M32-4M5
	A232-VII	L20E-2M10	M220-III	M320-V	M32-5M8
	A32-VII	L32-1M8	M220-V	M332-III	
	A320-VII	L32-1M10	M232-III	M332-V	

Ähnlich OEM Nr. similar to OEM no. semblable au OEM nombre	GSC-1310



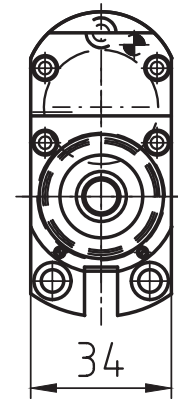
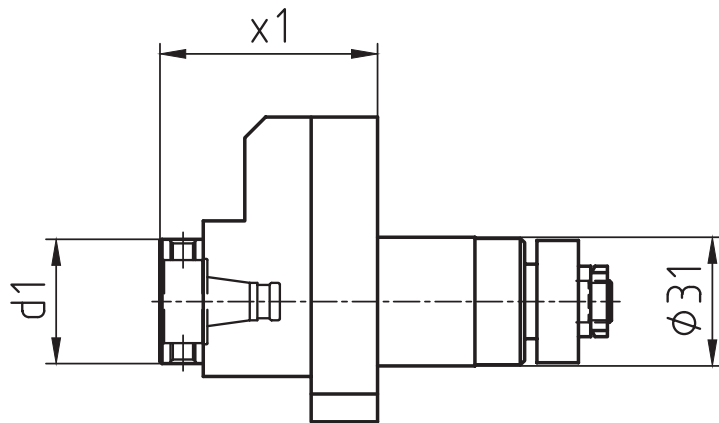
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	52,5	WFB 20-12	3	18.000	1:3				MPU.Z31.B20.BA0.131013

Passend für Maschine: suitable machines: approprié pour la machine:	A20-3F7N	L20E-2M8	L32-1M12	M232-V	M32-4M5
	A232-VII	L20E-2M10	M220-III	M320-V	M32-5M8
	A32-VII	L32-1M8	M220-V	M332-III	
	A320-VII	L32-1M10	M232-III	M332-V	

Ähnlich OEM Nr. similar to OEM no. semblable au OEM nombre	GSC-1310



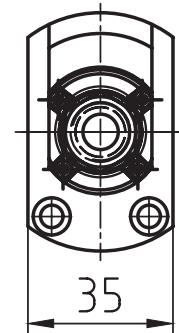
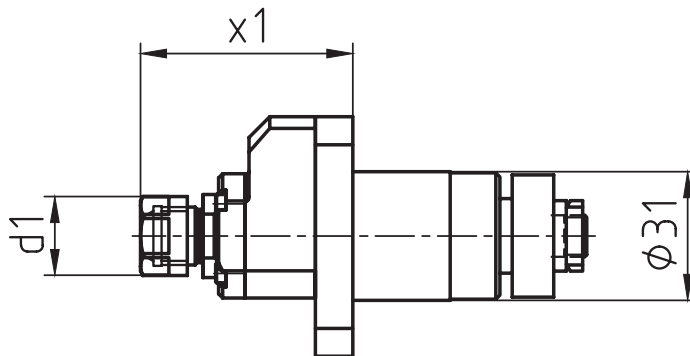
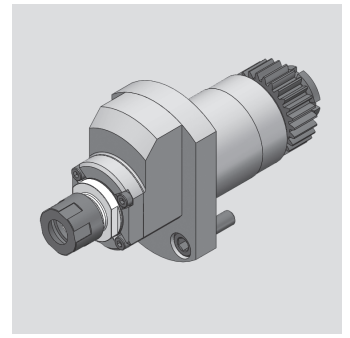
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

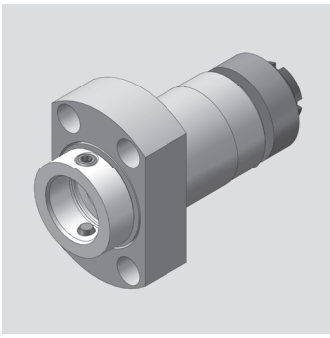
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
19	51,5	ER11	2	24.000	1:4				MPU.Z31.E11.BA0.131014

Passend für Maschine: sutable machines: approprié pour la machine:	A20-3F7N	L20E-2M8	L32-1M12	M232-V	M32-4M5
	A232-VII	L20E-2M10	M220-III	M320-V	M32-5M8
	A32-VII	L32-1M8	M220-V	M332-III	
	A320-VII	L32-1M10	M232-III	M332-V	

Ähnlich OEM Nr. similar to OEM no. semblable au OEM nombre	GSC-1310



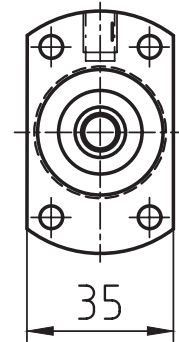
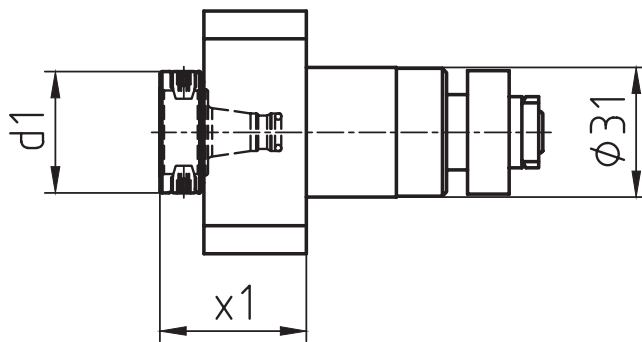
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	8	6.000	1:1				MPU.Z31.B20.AA0.L20V

<b>Passend für Maschine:</b>	L20E2M8
suitable machines:	L20E2M10
approprié pour la machine:	L20E-1M12
	L20E-IX

<b>Ähnlich OEM Nr.</b>	GSC-1210
similar to OEM no.	
semblable au OEM nombre	

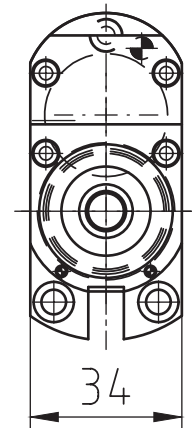
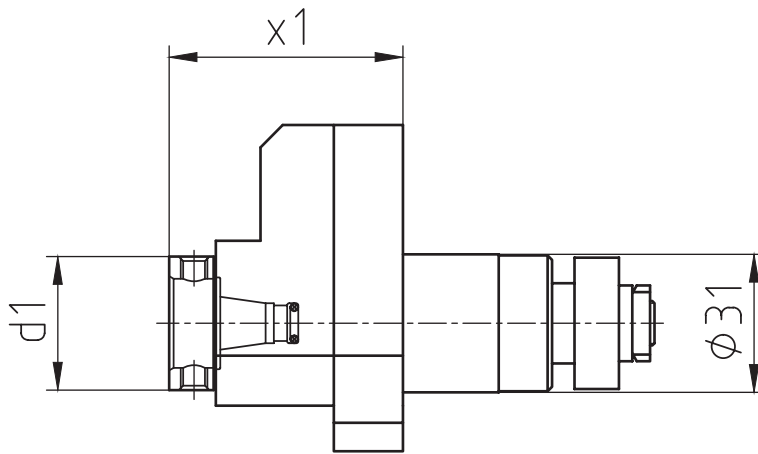
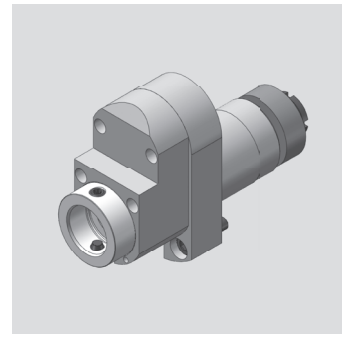
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

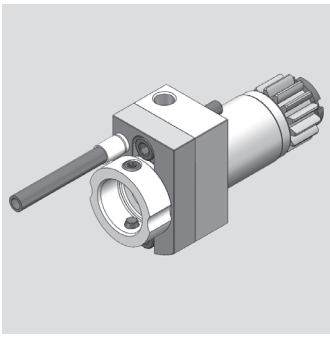
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	52,5	WFB 20-12	3	18.000	1:3				MPU.Z31.B20.BA0.L20R

<b>Passend für Maschine:</b>	L20E2M8	L20E-IX
suitable machines:	L20E2M10	
approprié pour la machine:	L20E2M12	

<b>Ähnlich OEM Nr.</b>	GSC-1210
similar to OEM no.	
semblable au OEM nombre	



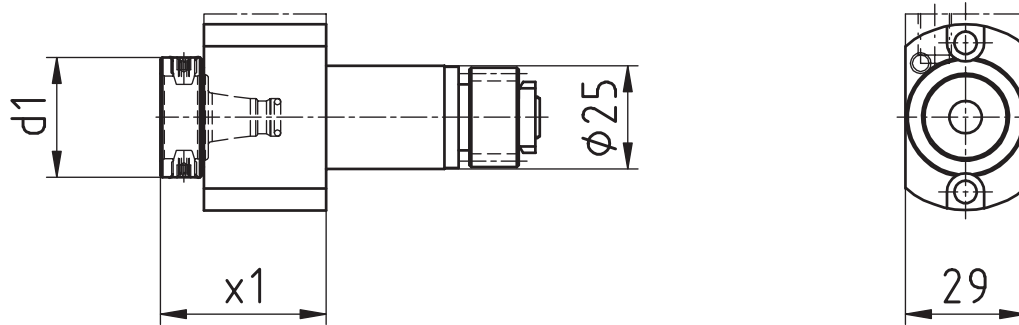
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1							
29	40	WFB 20-12	8	6.000 1:1				MPU.Z25.B20.AA0.VX
29	26,5	WFB 20-12	8	6.000 1:1				MPU.Z25.B20.AA0.L20R
29	36,5	WFB 20-12	8	6.000 1:1	x	x	80	MPU.Z25.B20.AE0.L20R

Passend für Maschine: suitable machines: approprié pour la machine:	A20-VII	L20E-2M10	M220-III	M320-V	M212-C	M312-V	M16-4M8
	A20-3F7N	L20E-2M8	M220-V	M332-III	M212-V	M312-VII	
	A320-VII	L20E-IX	M232-III	M332-V	M216-C	M316-III	
	L 12-1M7	L20X	M232-V	M32-4MS	M216-V	M316-V	
	L20E-2M12	L32-1M12	M320-III	M32-4M8	M312-III	M16-4MS	

Ähnlich OEM Nr. similar to OEM no. semblable au OEM nombre	MSC-507

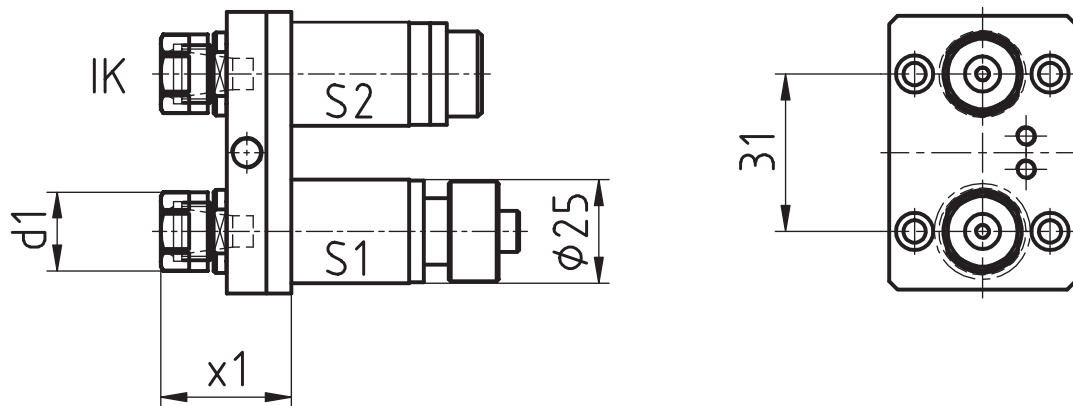
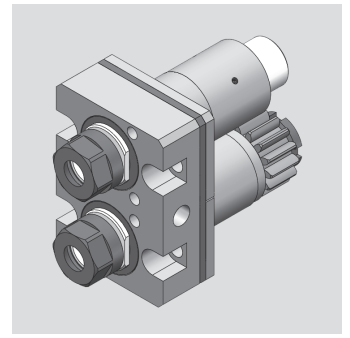
# Citizen

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35

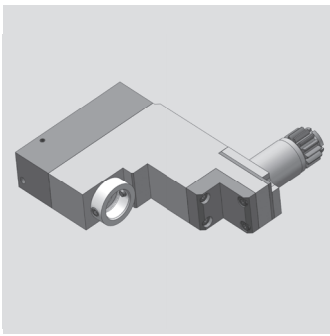


[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
19	31	ER11	4*	6.000*	1:1*	x			MPU.Z25.E11.MA0.L20
19	31	ER11	4*	6.000*	1:1*	x	x	80	MPU.Z25.E11.ME0.L20

<b>Passend für Maschine:</b>	L20E2M8	L20E-IX	L20X	M232-III
suitable machines:	L20E2M10	L20V	M220-III	
approprié pour la machine:	L20E-1M12	L20VIII	M220-V	

<b>Ähnlich OEM Nr.</b>	
similar to OEM no.	
semblable au OEM nombre	

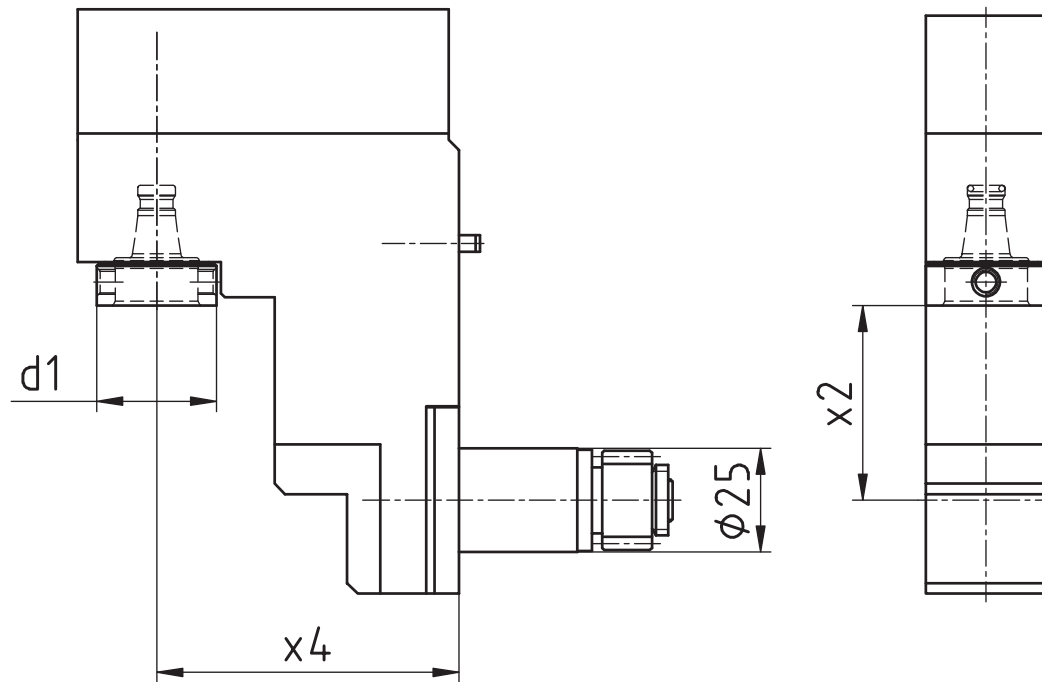
\* S1: 4 Nm/6.000 rpm/i=1:1  
S2: 2 Nm/9.660 rpm/i=1:1,61



# Citizen

**Radial-Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i	p		
29	47	73	WFB 20-12	8	6.000	1:1			MPU.Z25.B20.VA0.L20R

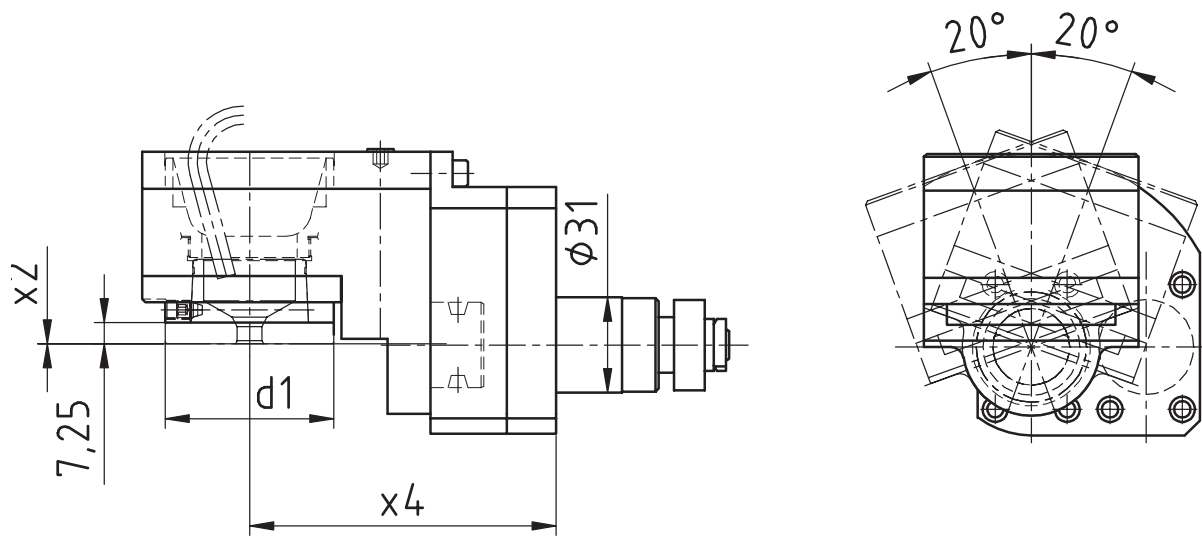
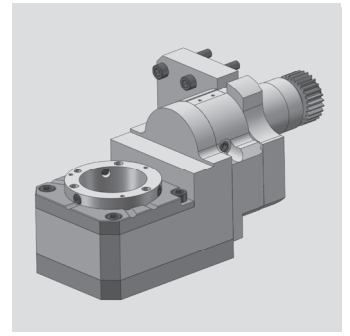
<b>Passend für Maschine:</b>	L20E2M8	L20E-IX
suitable machines:	L20E2M10	L20X
approprié pour la machine:	L20E-1M12	L20XII

<b>Ähnlich OEM Nr.</b>	GSC-1507
similar to OEM no.	
semblable au OEM nombre	

# Citizen

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

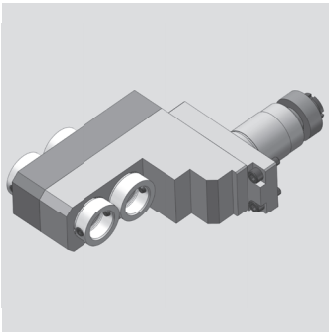
**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4				i				
54	0	100	WFW 50	16	6.000	1:1	x			MPU.LSW.101.M0800.L20N

<b>Passend für Maschine:</b>	L20E-2M8	L20E-IX	L32-1M12
suitable machines:	L20E-2M10	L32-1M8	
approprié pour la machine:	L20E-2M12	L32-1M10	

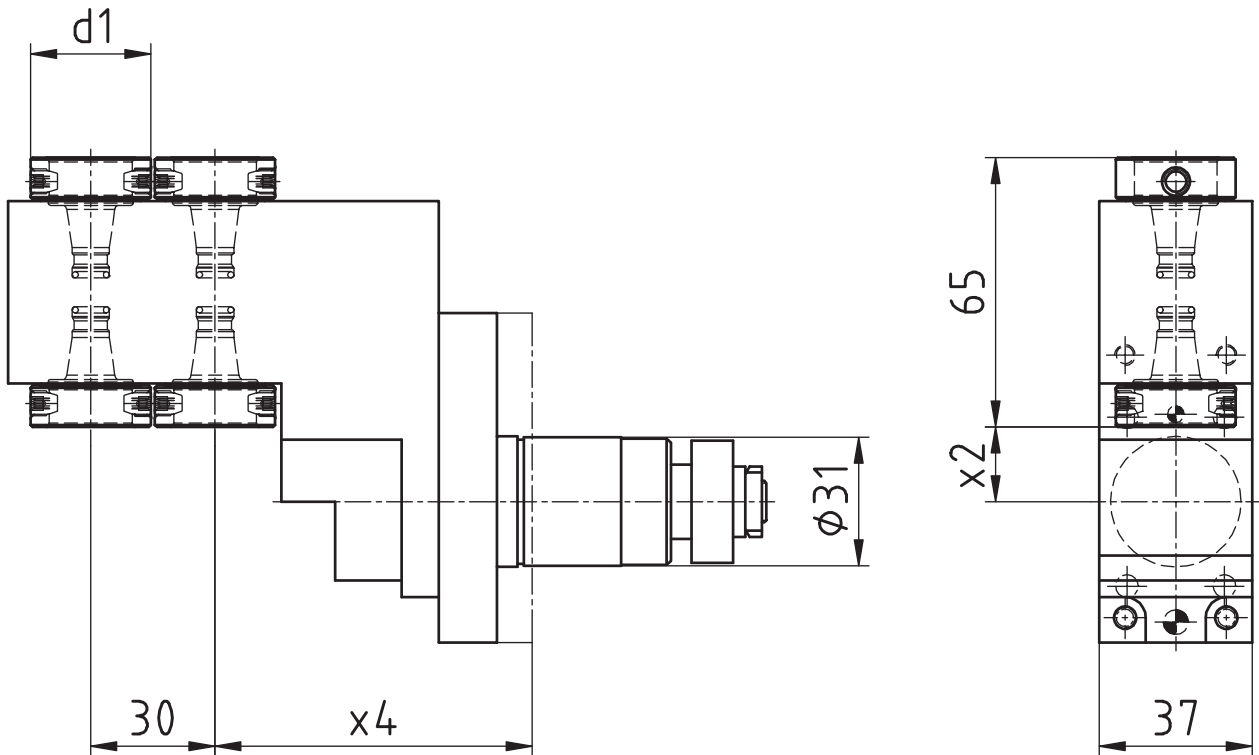
<b>Ähnlich OEM Nr.</b>	
similar to OEM no.	
semblable au OEM nombre	



# Citizen

**Radial-Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4							
29	18	76,5	WFB 20-12	3	8.880	1:1,48			MPU.Z31.B20.4A0.3107

<b>Passend für Maschine:</b>	L20E2M8	L20E-IX	L20VIII
suitable machines:	L20E2M10	L20V	L20X
approprié pour la machine:	L20E-1M12	L20VII	

<b>Ähnlich OEM Nr.</b>	GSE-3107
similar to OEM no.	
semblable au OEM nombre	



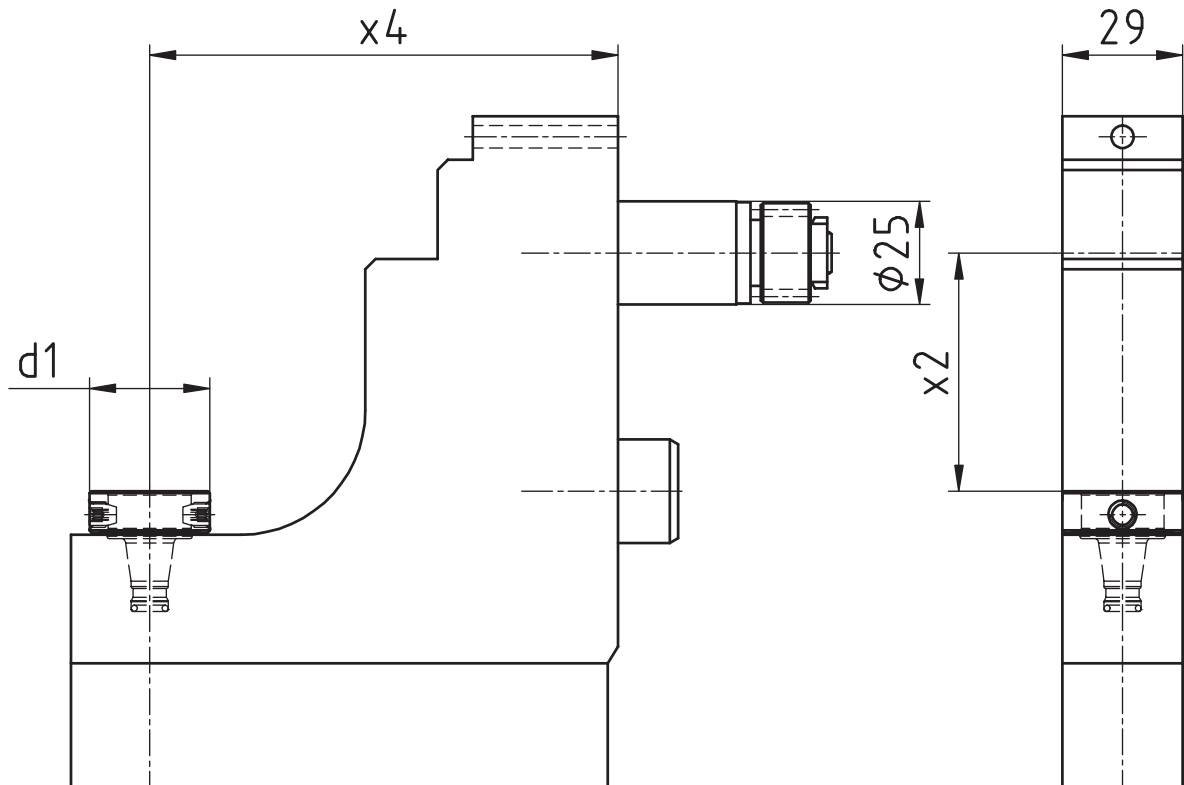
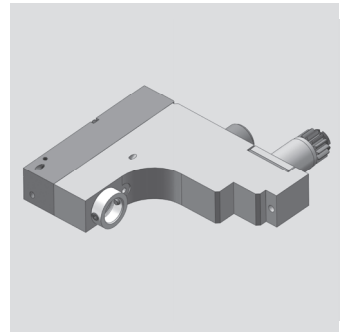
# Citizen

## Radial-Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4			i					
29	57,5	113	WFB 20-12	8	6.000	1:1	x			MPU.Z25.B20.VA0.L20V

Passend für Maschine: L20X  
 suitable machines:  
 approprié pour la machine:

Ähnlich OEM Nr. GSC-1407  
 similar to OEM no.  
 semblable au OEM nombre



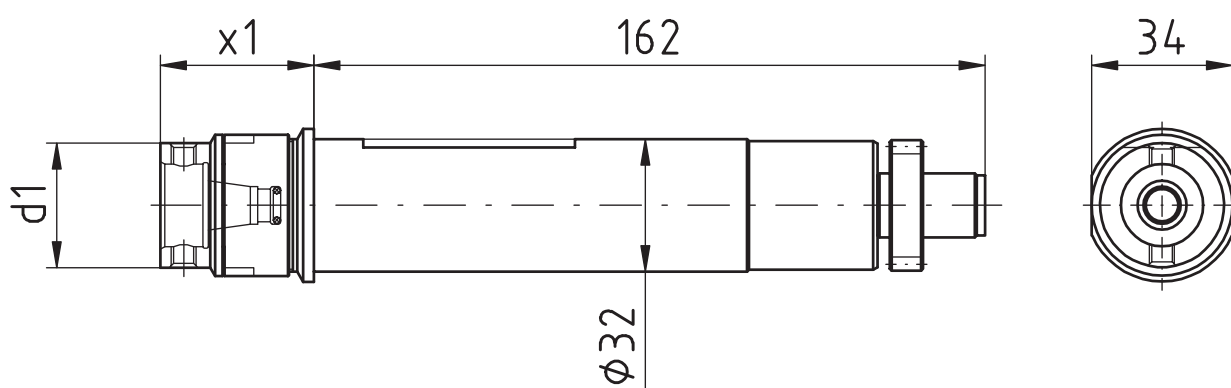
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	37	WFB 20-12	10	6.000	1:1				MPU.GSC.310.AA0.B20

Passend für Maschine: L25  
 suitable machines: L32  
 approprié pour la machine:

Ähnlich OEM Nr.  
 similar to OEM no.  
 semblable au OEM nombre

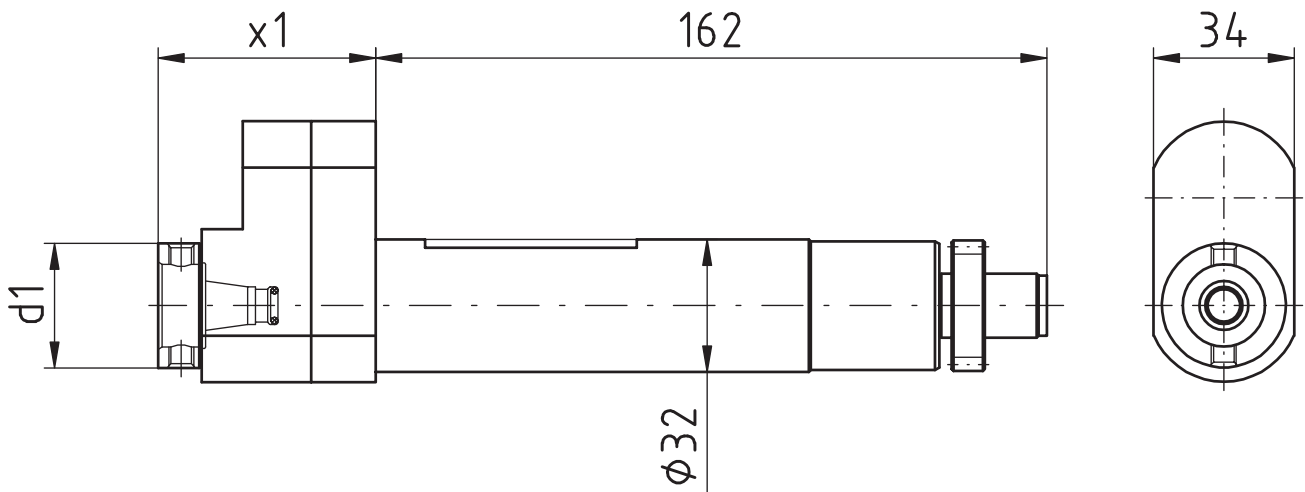
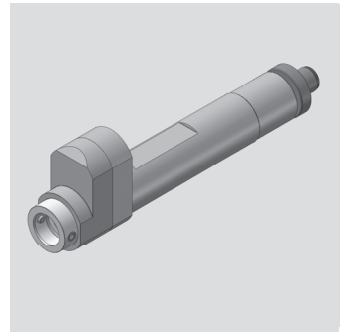
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

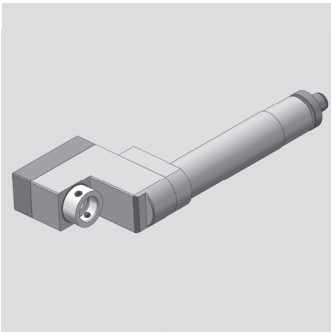
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	52,5	WFB 20-12	3	18.000	1:3				MPU.GSC.610.AA0.B20

Passend für Maschine: L25  
 suitable machines: L32  
 approprié pour la machine:

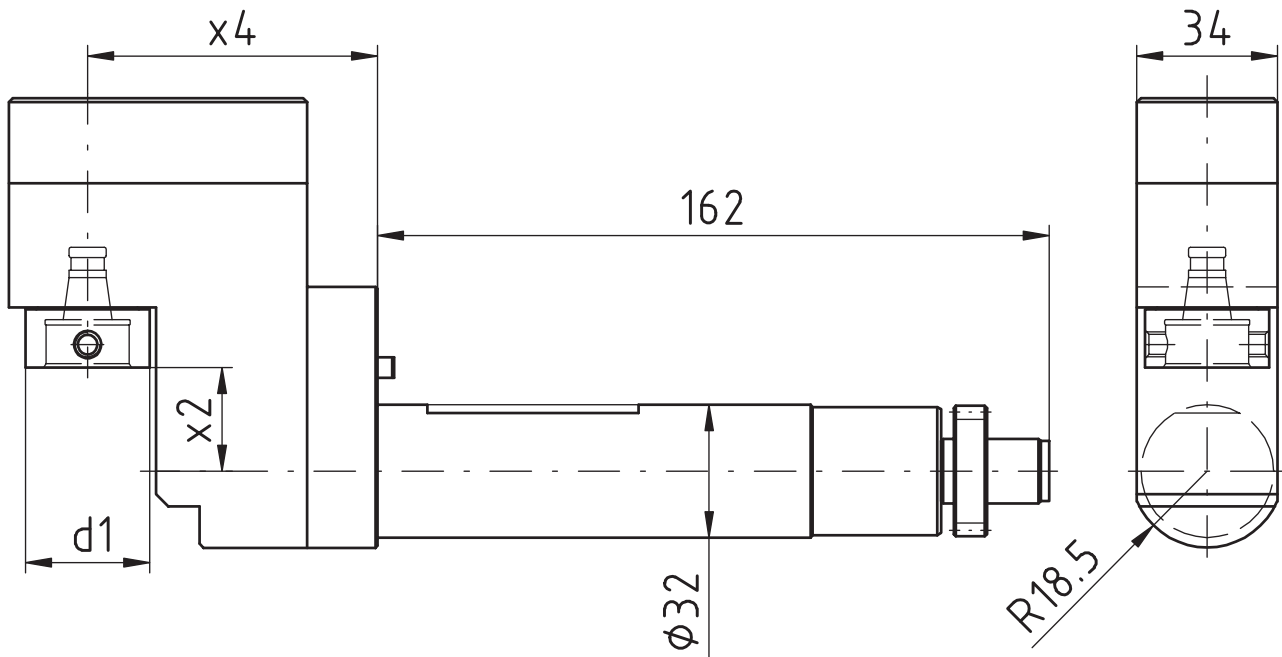
Ähnlich OEM Nr.  
 similar to OEM no.  
 semblable au OEM nombre



# Citizen

**Radial-Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	4	12.000	1:2			MPU.GSE.307.XA0.B20

**Passend für Maschine:** L25  
 suitable machines: L32  
 approprié pour la machine:

**Ähnlich OEM Nr.**  
 similar to OEM no.  
 semblable au OEM nombre

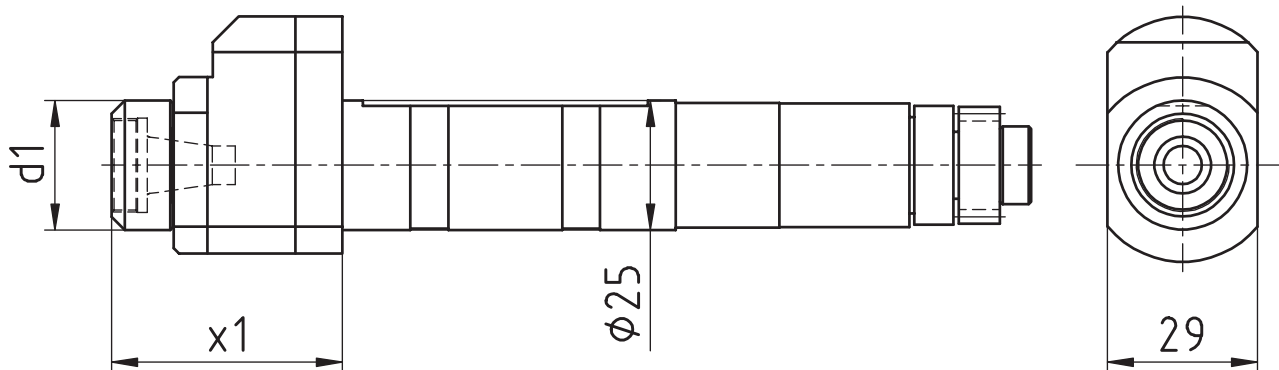
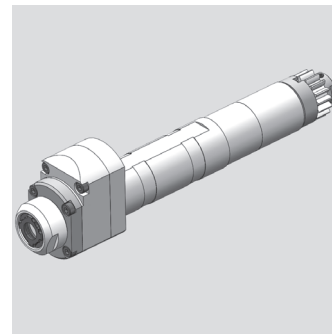
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

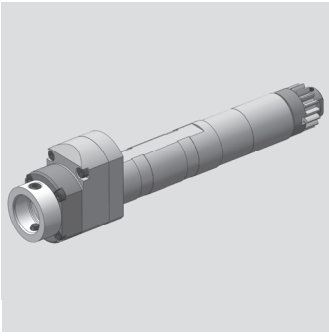
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
25	44,5	ER11	3	24.000	1:3				MPU.GSC.607.BA0.E11

<b>Passend für Maschine:</b>	M212-C	M216-V	M316-III
suitable machines:	M212-V	M312-III	M316-V
approprié pour la machine:	M216-C	M312-V	

<b>Ähnlich OEM Nr.</b>	GSC-607
similar to OEM no.	
semblable au OEM nombre	



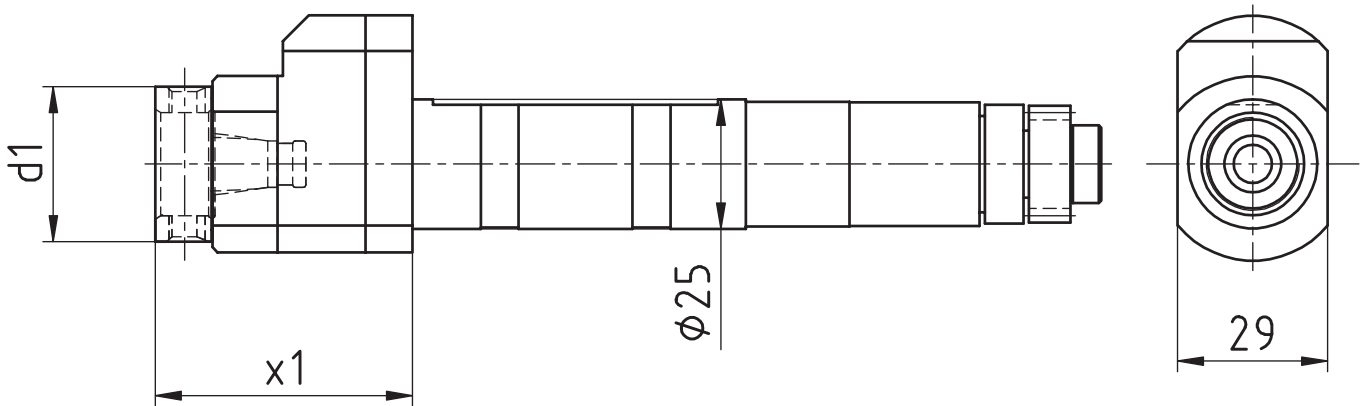
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
29	49,6	WFB 20-12	3	24.000	1:3				MPU.GSC.607.BA0.B20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	M212-C	M216-V	M316-III
	M212-V	M312-III	M316-V
	M216-C	M312-V	

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	GSC-607
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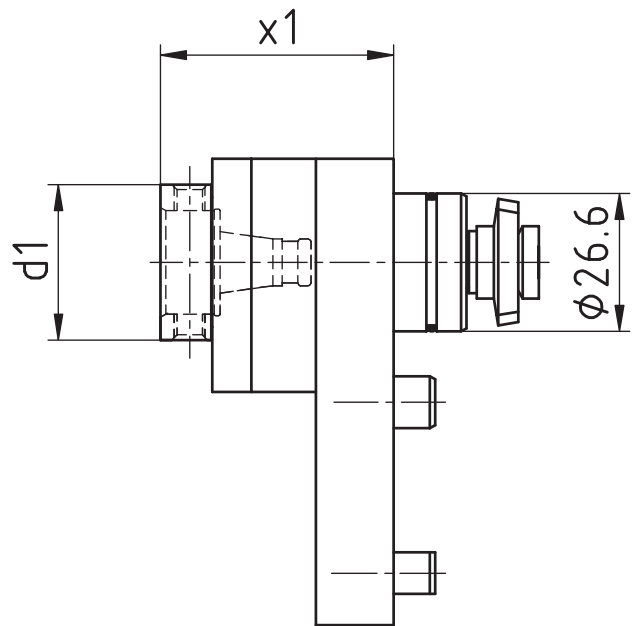
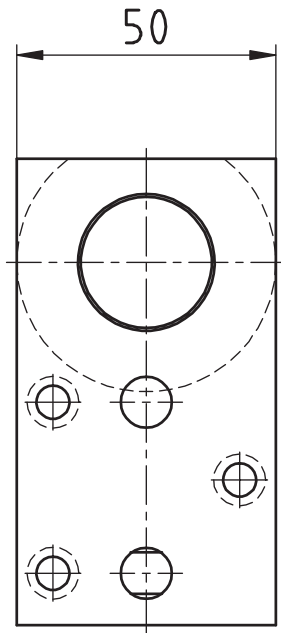
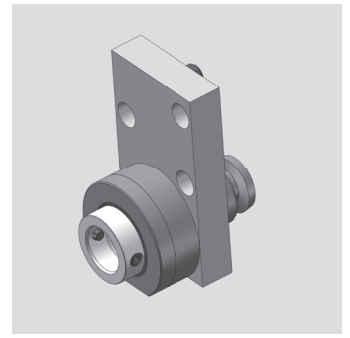
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

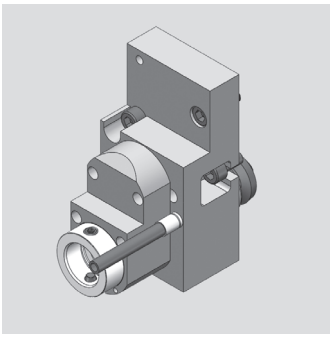
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	45	WFB 20-12	10	6.000	1:1				MPU.MSC.106.AA0.B20

<b>Passend für Maschine:</b>	M212-C	M216-V	M316-III	M16-4M8
suitable machines:	M212-V	M312-III	M316-V	
approprié pour la machine:	M216-C	M312-V	M16-4MS	

<b>Ähnlich OEM Nr.</b>	MSC-106
similar to OEM no.	
semblable au OEM nombre	



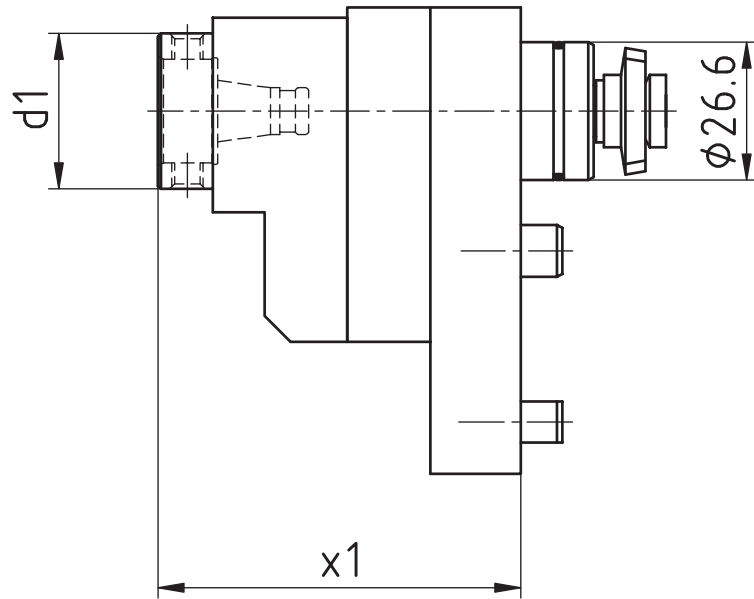
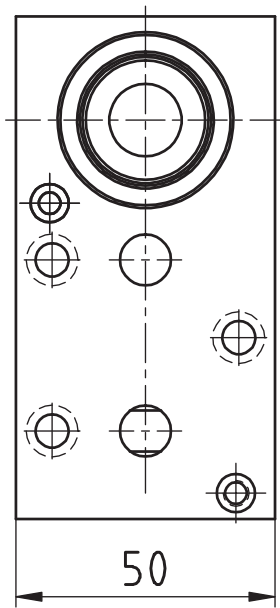
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	3	18.000	1:3				MPU.MSC.106.BA0.B20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	M212-C	M216-V	M316-III	M16-4MB
	M212-V	M312-III	M316-V	
	M216-C	M312-V	M16-4MS	

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	MSC-106
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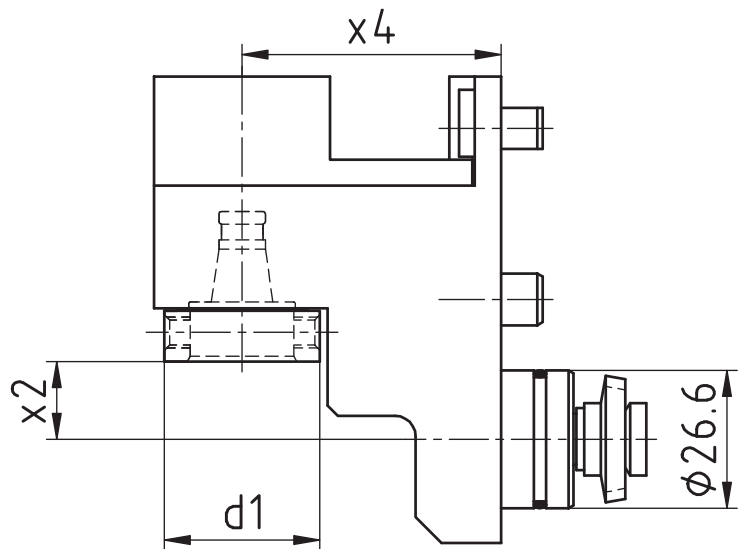
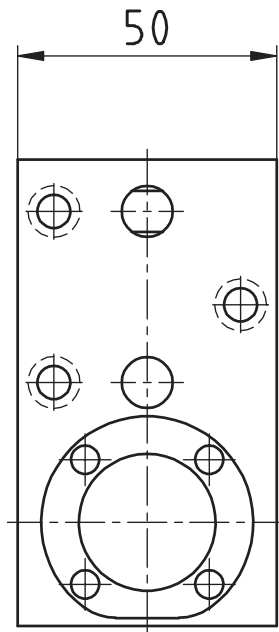
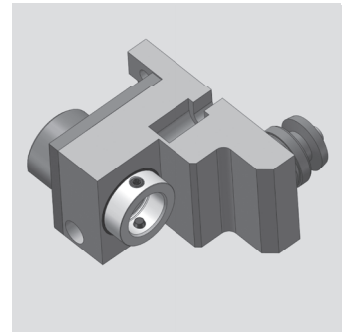
# Citizen

## Radial-Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

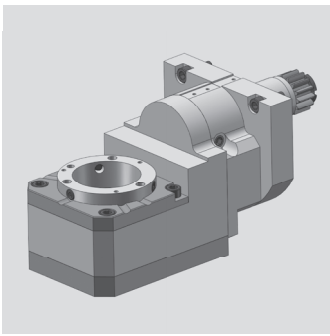
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i		p	
30	15	50	WFB 20-12	6	12.000	1:2			MPU.MSE.106.XA0.B20

<b>Passend für Maschine:</b>	M212-C	M216-V	M316-III	M16-4M8
suitable machines:	M212-V	M312-III	M316-V	
approprié pour la machine:	M216-C	M312-V	M16-4M5	

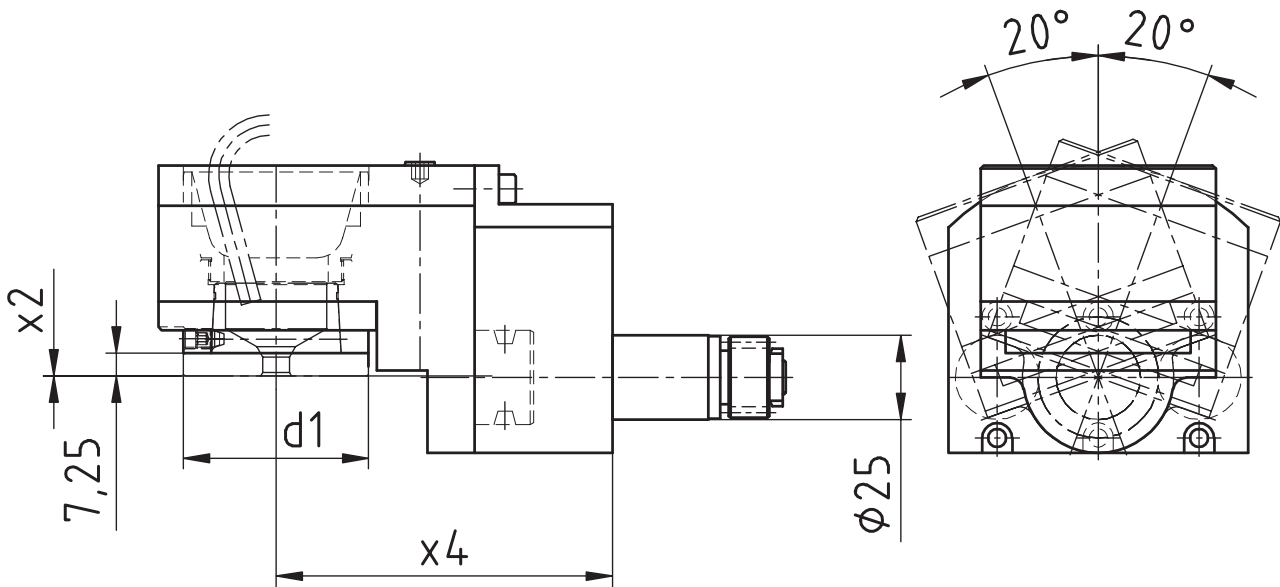
<b>Ähnlich OEM Nr.</b>	MSE-106
similar to OEM no.	
semblable au OEM nombre	



# Citizen

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
54	0	100	WFW 50	16	6.000	1:1	x			MPU.LSW.424.M0800.M16

<b>Passend für Maschine:</b>	M16-4M5
suitable machines:	M16-4M8
approprié pour la machine:	L 12-1M7

<b>Ähnlich OEM Nr.</b>	
similar to OEM no.	
semblable au OEM nombre	

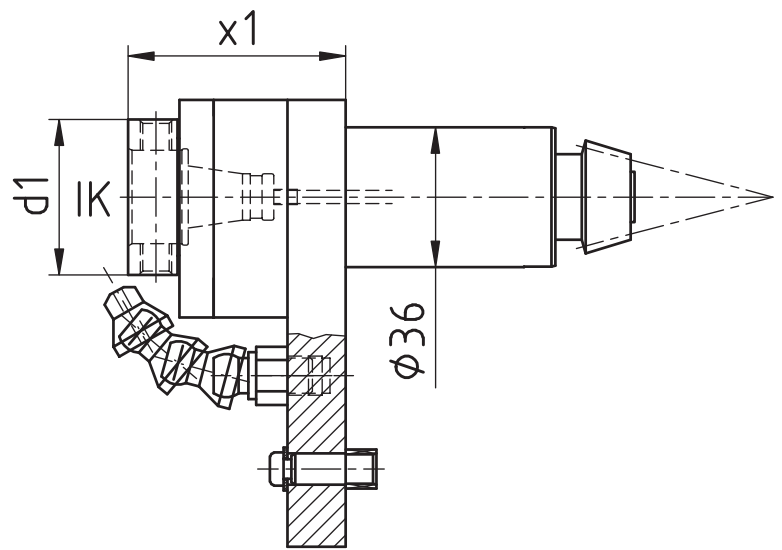
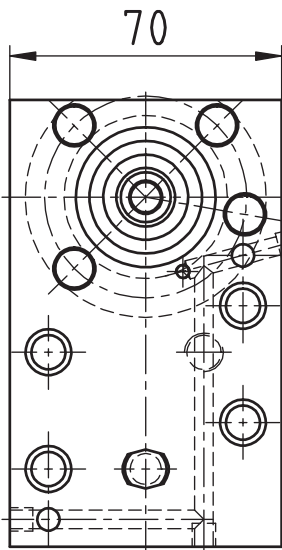
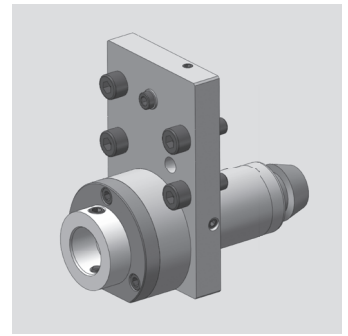
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

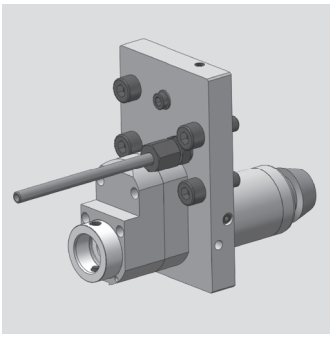
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
40	56	WFB 24-16	16	5.000	1:1	x			MPU.KSC.110.AA0.B24
40	56	WFB 24-16	16	5.000	1:1	x	x	80	MPU.KSC.110.AE0.B24

<b>Passend für Maschine:</b>	M220-III	M232-V	M332-III	M32-4M8
suitable machines:	M220-V	M320-III	M332-V	
approprié pour la machine:	M232-III	M320-V	M32-4M5	

<b>Ähnlich OEM Nr.</b>	KSC-110
similar to OEM no.	
semblable au OEM nombre	



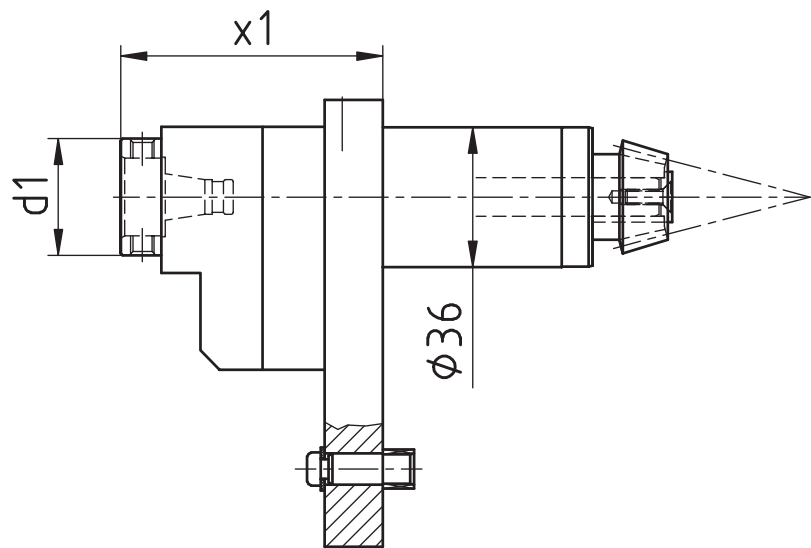
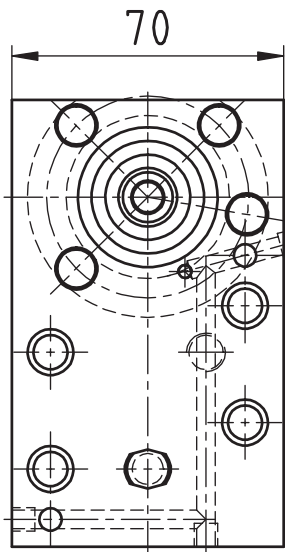
# Citizen

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	3	15.000	1:3	x		MPU.KSC.110.BA0.B20

<b>Passend für Maschine:</b>	M220-III	M232-V	M332-III	M32-4M8
suitable machines:	M220-V	M320-III	M332-V	
approprié pour la machine:	M232-III	M320-V	M32-4M5	

<b>Ähnlich OEM Nr.</b>	KSC-110
similar to OEM no.	
semblable au OEM nombre	

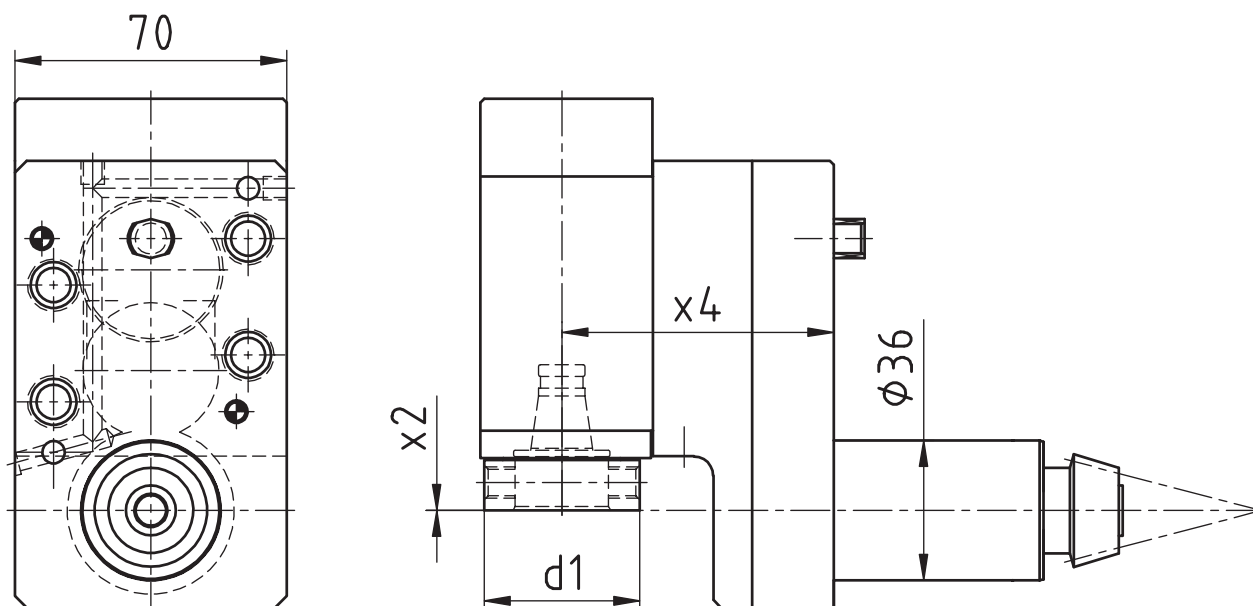
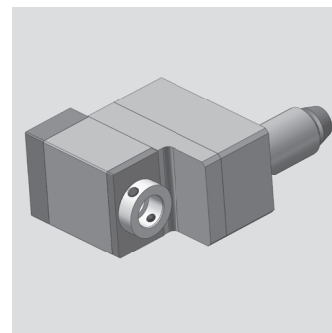
# Citizen

## Radial-Bohr- und Fräskopf

Radial drilling and milling head )

Outil de perçage et de fraisage radiale

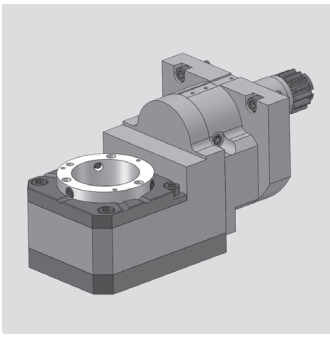
WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
40	0	70	WFB 24-16	10	10.000	1:2	x			MPU.KSE.310.XA0.B24
40	0	70	WFB 24-16	10	10.000	1:2	x	x	80	MPU.KSE.310.XE0.B24
50	30	70	WFB 32-20	15	5.000	1:1	x			MPU.KSE.310.VA0.B32
50	30	70	WFB 32-20	15	5.000	1:1	x	x	80	MPU.KSE.310.VE0.B32
50	30	70	WFB 32-20	30	2.500	2:1	x			MPU.KSE.310.WA0.B32
50	30	70	WFB 32-20	30	2.500	2:1	x	x	80	MPU.KSE.310.WE0.B32

<b>Passend für Maschine:</b>	M220-III	M232-V	M332-III	M32-4M8
suitable machines:	M220-V	M320-III	M332-V	
approprié pour la machine:	M232-III	M320-V	M32-4M5	

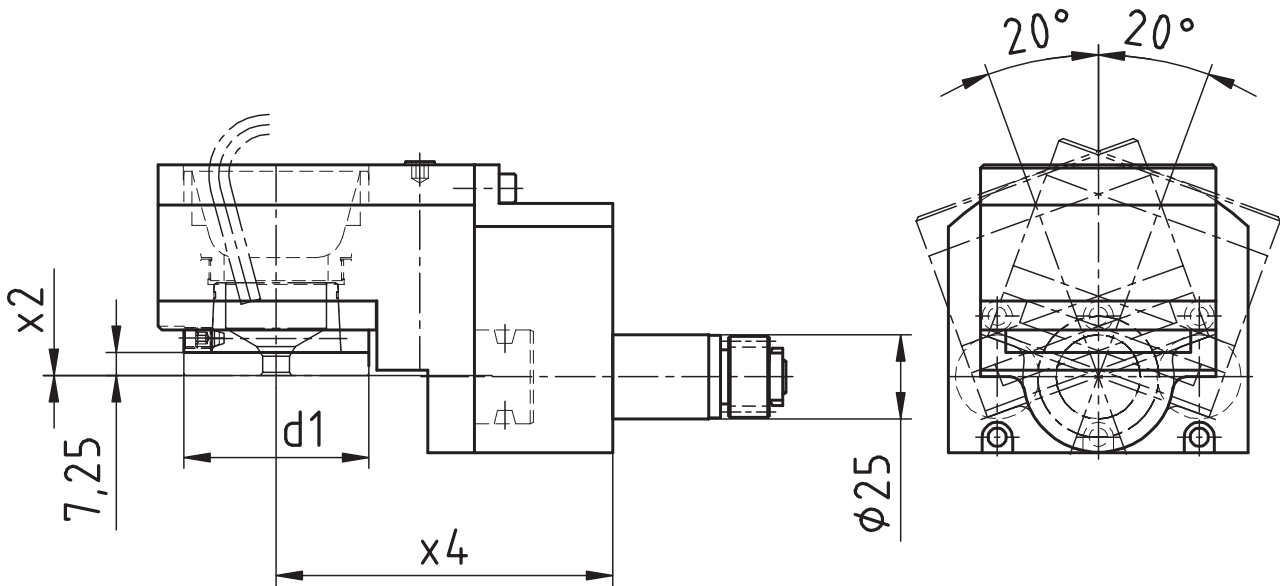
<b>Ähnlich OEM Nr.</b>	KSC-110
similar to OEM no.	
semblable au OEM nombre	



# Citizen

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i	p		
54	0	100	WFW 50	16	6.000	1:1	x		MPU.LSW.101.M0800.L12

**Passend für Maschine:** L12  
 suitable machines:  
 approprié pour la machine:

**Ähnlich OEM Nr.**  
 similar to OEM no.  
 semblable au OEM nombre

Modulare Aggregatetechnik

**DMG MORI**



Werkzeugtechnik



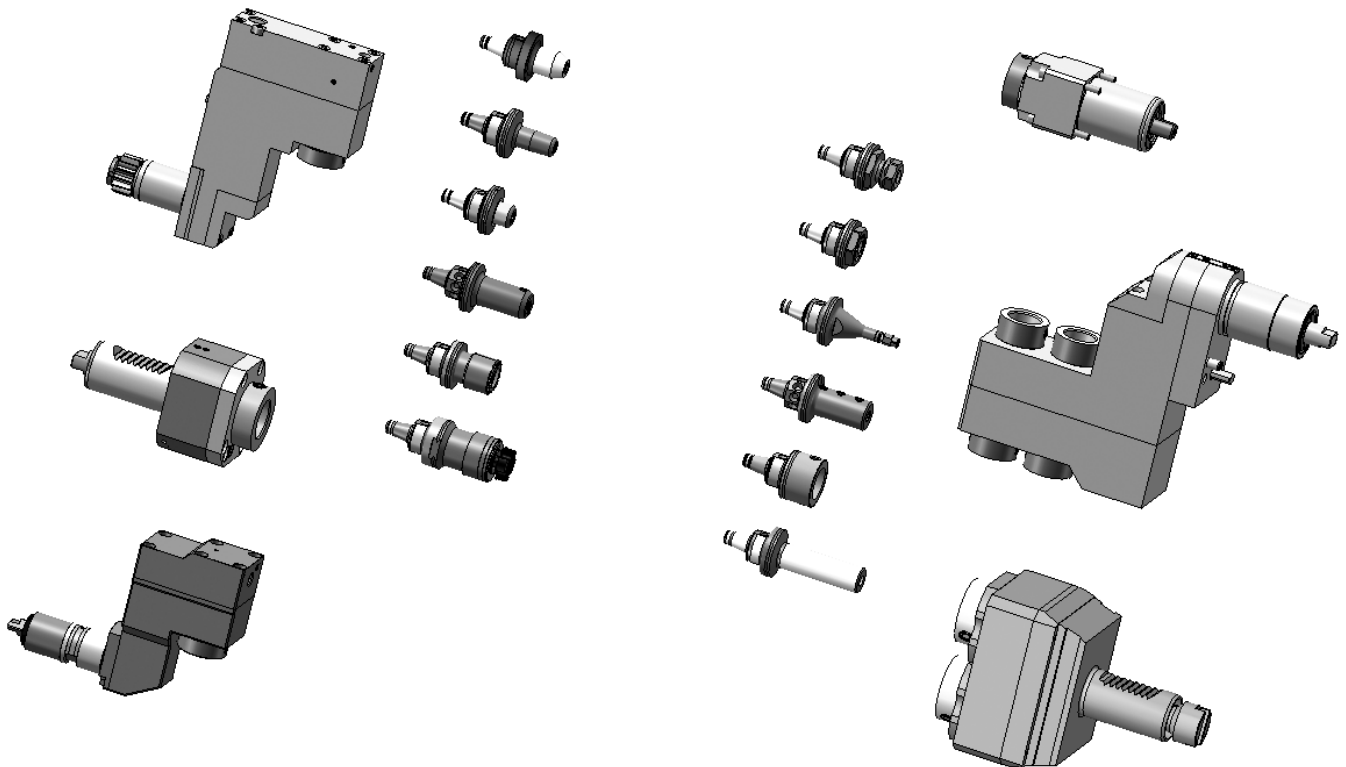
**Katalog  
GS-02**

# W&F

ph HORN ph

## WFB-Adapterpool

Indications for the customer



Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindel-drehen ein durchgängiges modulares Werkzeug-system einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.



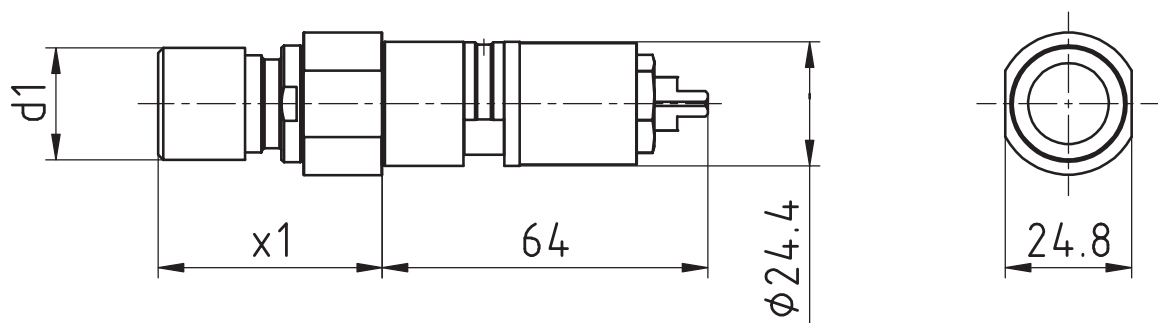
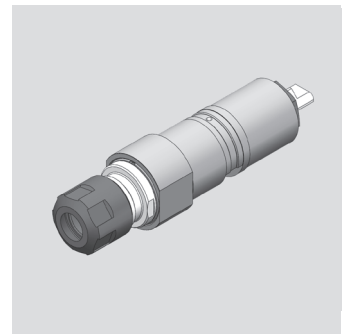
# DMG MORI - SPRINT

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

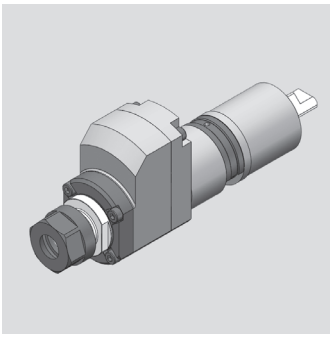
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>		Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1			i					
22	44	ER16 MINI	8	6.000	1:1				MPU.Z24.E16.AA0.SP20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Sprint 2015	Speed 2018
	Sprint 2018	Speed 2018 linear
	Sprint 2018 linear	Speed 20111 linear



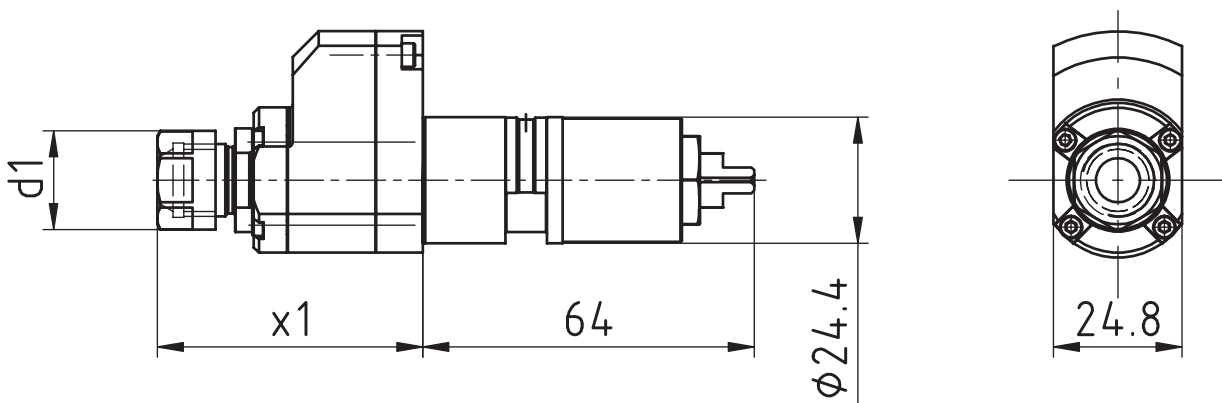
# DMG MORI - SPRINT

## Axial-Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1	ER11	2	24.000	1:4				MPU.Z24.E11.BA0.SP20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Sprint 2015	Speed 2018
	Sprint 2018	Speed 2018 linear
	Sprint 2018 linear	Speed 2011 linear

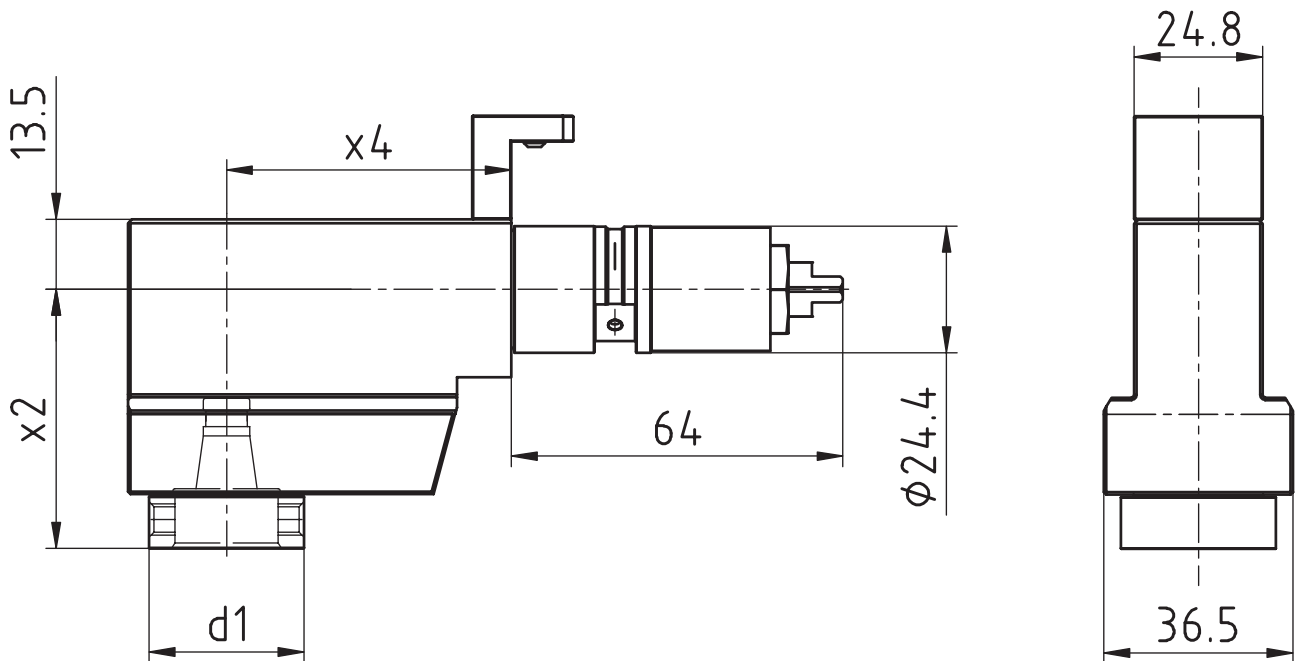
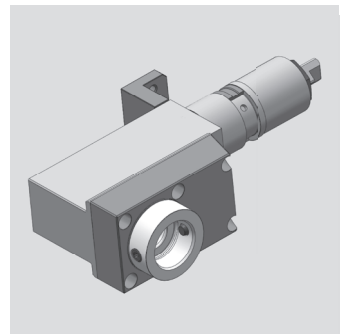
# DMG MORI - SPRINT

## Radial-Bohr- und Fräskopf

Radial drilling and milling head

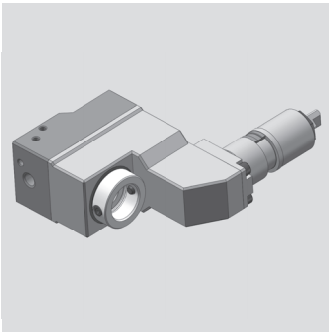
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer
30	50	55	WFB 20-12	5	9.000	1:1,5			MPU.Z24.B20.RA0.SP20

Passend für Maschine: sutable machines: approprié pour la machine:	Sprint 2015	Speed 2018
	Sprint 2018	Speed 2018 linear
	Sprint 2018 linear	Speed 20111 linear



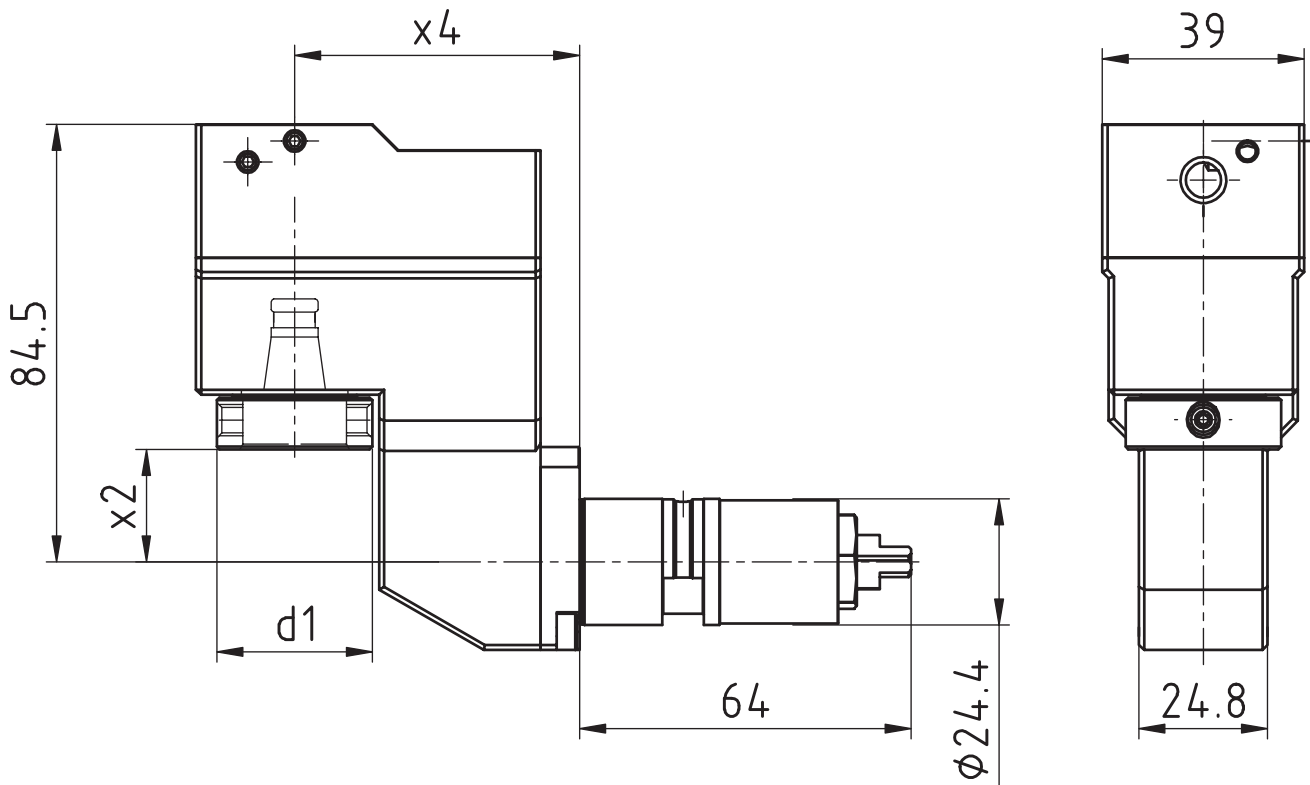
# DMG MORI - SPRINT

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



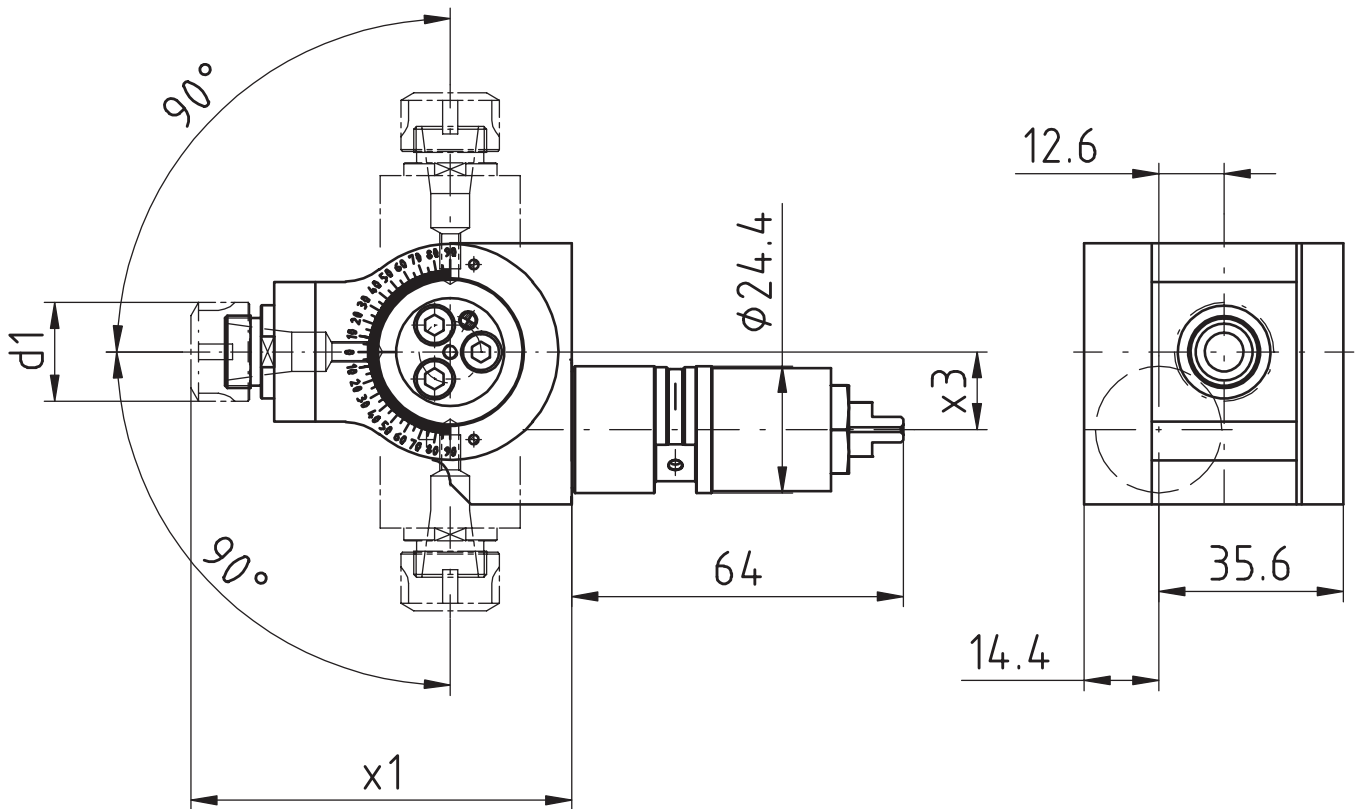
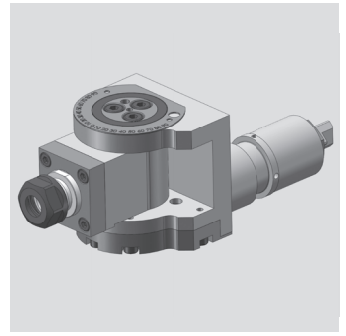
[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	21,75	55	WFB 20-12	4	11.150	1:1,86			MPU.Z24.B20.OA0.SP20
30	21,75	55	WFB 20-12	4	11.150	1:1,86	x	80	MPU.Z24.B20.OE0.SP20
30	21,75	65	WFB 20-12	4	11.150	1:1,86			MPU.Z24.B20.OA0.SP20S
30	21,75	65	WFB 20-12	4	11.150	1:1,86	x	80	MPU.Z24.B20.OE0.SP20S

<b>Passend für Maschine:</b>	Sprint 2015	Speed 2018
suitable machines:	Sprint 2018	Speed 2018 linear
approprié pour la machine:	Sprint 2018 linear	Speed 20111 linear

# DMG MORI - SPRINT

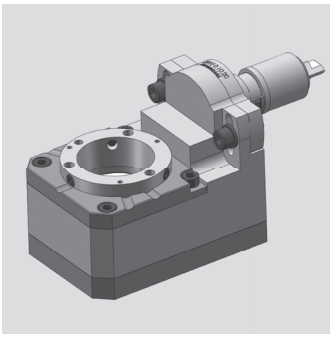
**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	x3			i					
19	50	15	ER11	5	6.000	1:1				MPU.Z24.E11.SA0.SP20

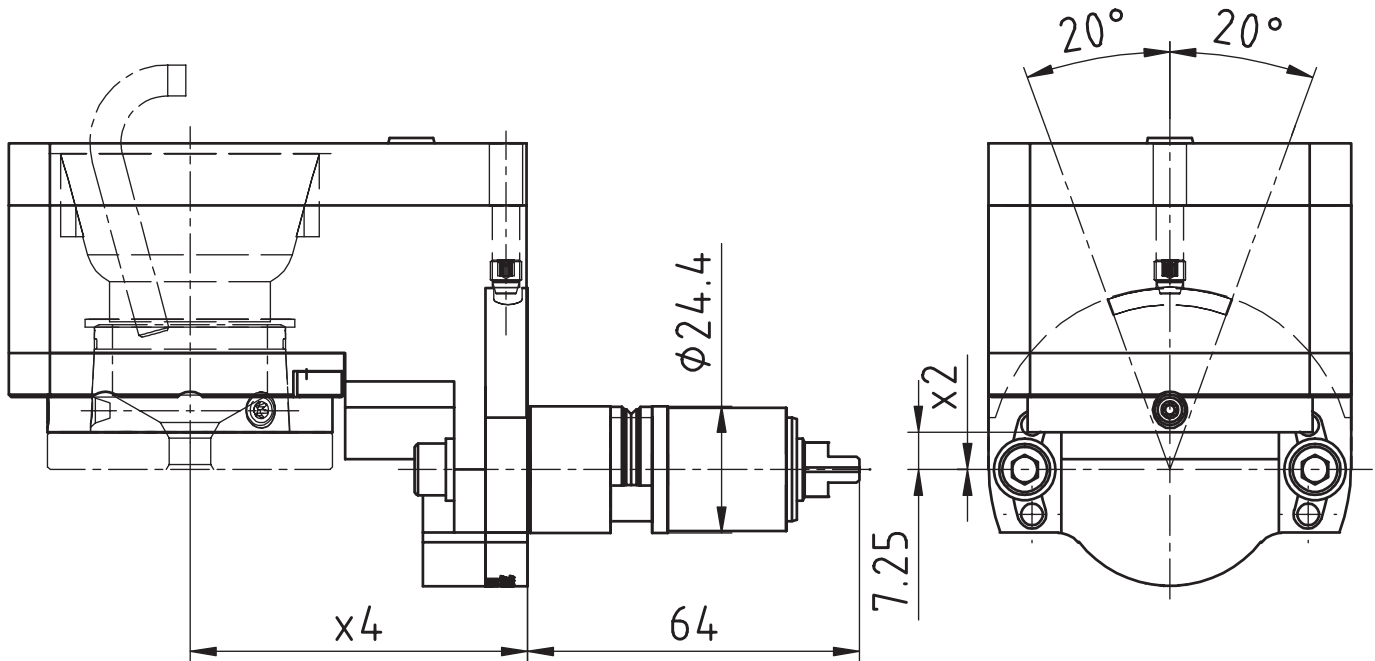
<b>Passend für Maschine:</b> sutable machines: approprié pour la machine:	Sprint 2015	Speed 2018
	Sprint 2018	Speed 2018 linear
	Sprint 2018 linear	Speed 20111 linear



# DMG MORI - SPRINT

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer
54	0	65,2	WFW 50	16	3.000	2:1	x		MPU.Z24.M0800.SP20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Sprint 2015	Speed 2018
	Sprint 2018	Speed 2018 linear
	Sprint 2018 linear	Speed 20111 linear

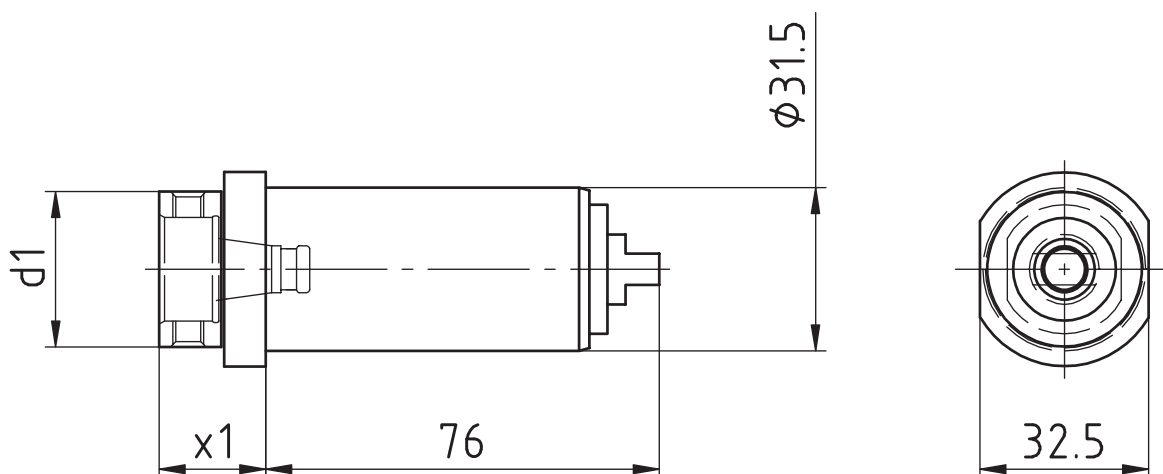
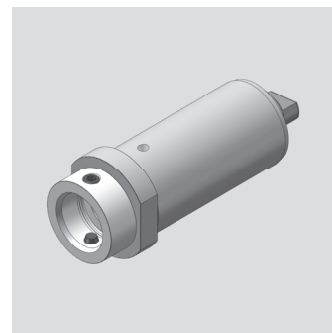
# DMG MORI - SPRINT

## Axial Bohr- und Fräskopf

Axial drilling and milling head

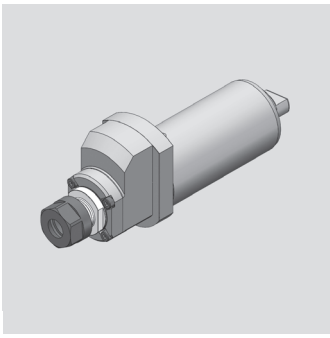
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	20,5	WFB 20-12	10	6.500	1:1				MPU.M31.B20.AA0.SP42

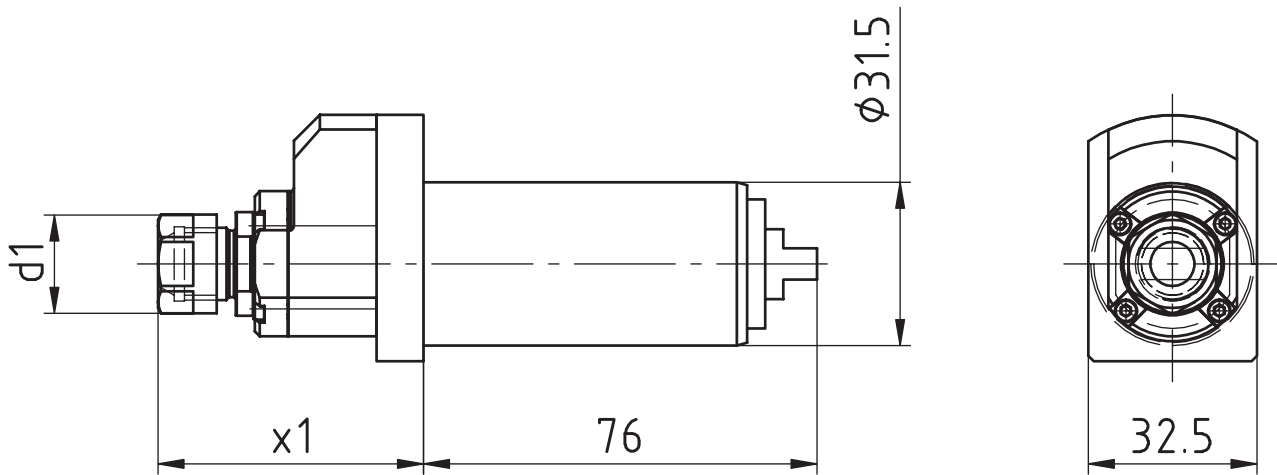
Passend für Maschine: suitable machines: approprié pour la machine:	Sprint 3215	Sprint 42110 linear
	Sprint 3218	Speed 32110 linear
	Sprint 42 linear	



# DMG MORI - SPRINT

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1	ER11	2	26.000	1:4				MPU.M31.E11.BA0.SP42

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Sprint 3215	Sprint 42 10 linear
	Sprint 3218	Speed 3210 linear
	Sprint 42 linear	



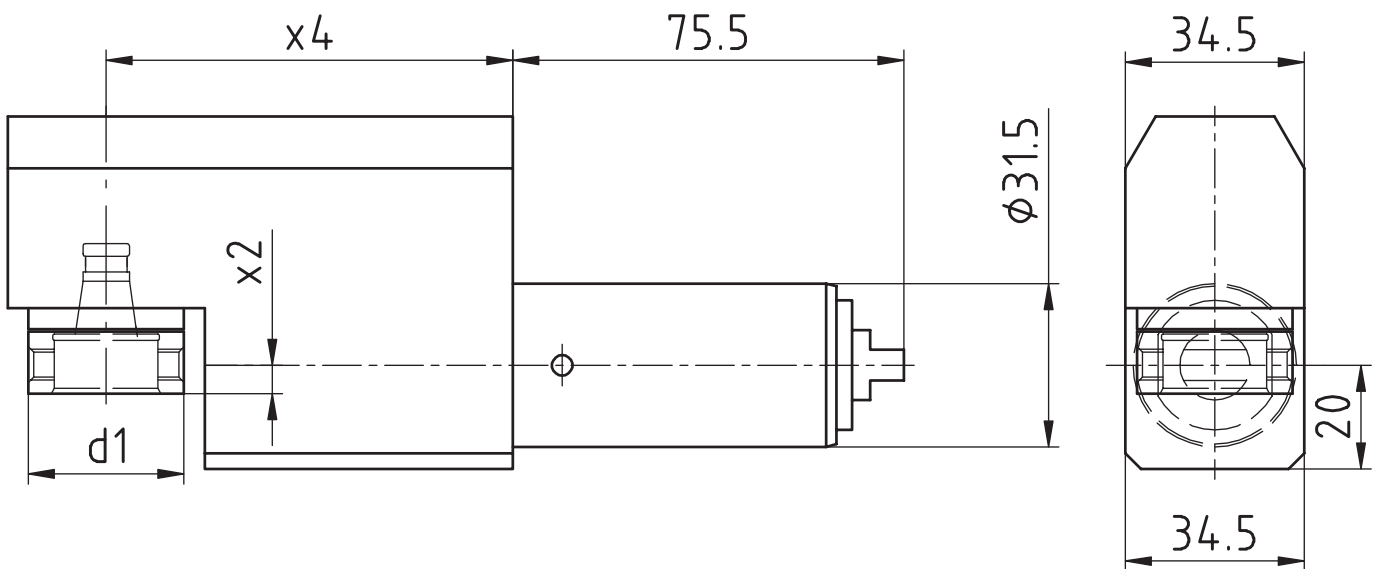
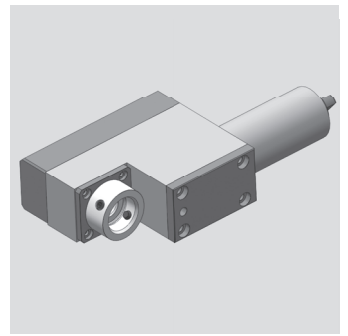
# DMG MORI - SPRINT

## Radial Bohr- und Fräskopf

Radial drilling and milling head

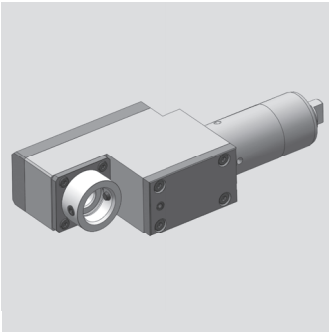
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	5,5	78,5	WFB 20-12	3	19.500	1:3				MPU.M31.B20.ZA0.SP42
30	5,5	78,5	WFB 20-12	3	19.500	1:3		x	80	MPU.M31.B20.ZE0.SP42
30	5,5	78,5	WFB 20-12	12	5.200	1,25:1				MPU.M31.B20.VA0.SP42

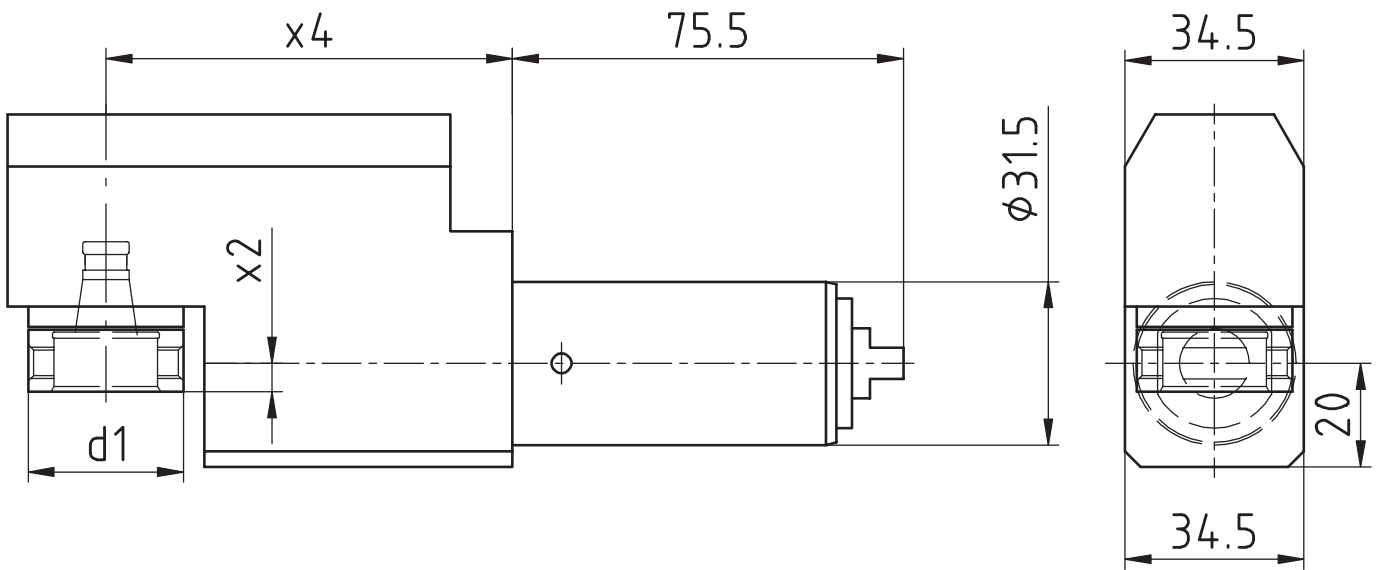
<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Sprint 32i5	Sprint 42i10 linear
	Sprint 32i8	Speed 32i10 linear
	Sprint 42 linear	



# DMG MORI - SPRINT

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



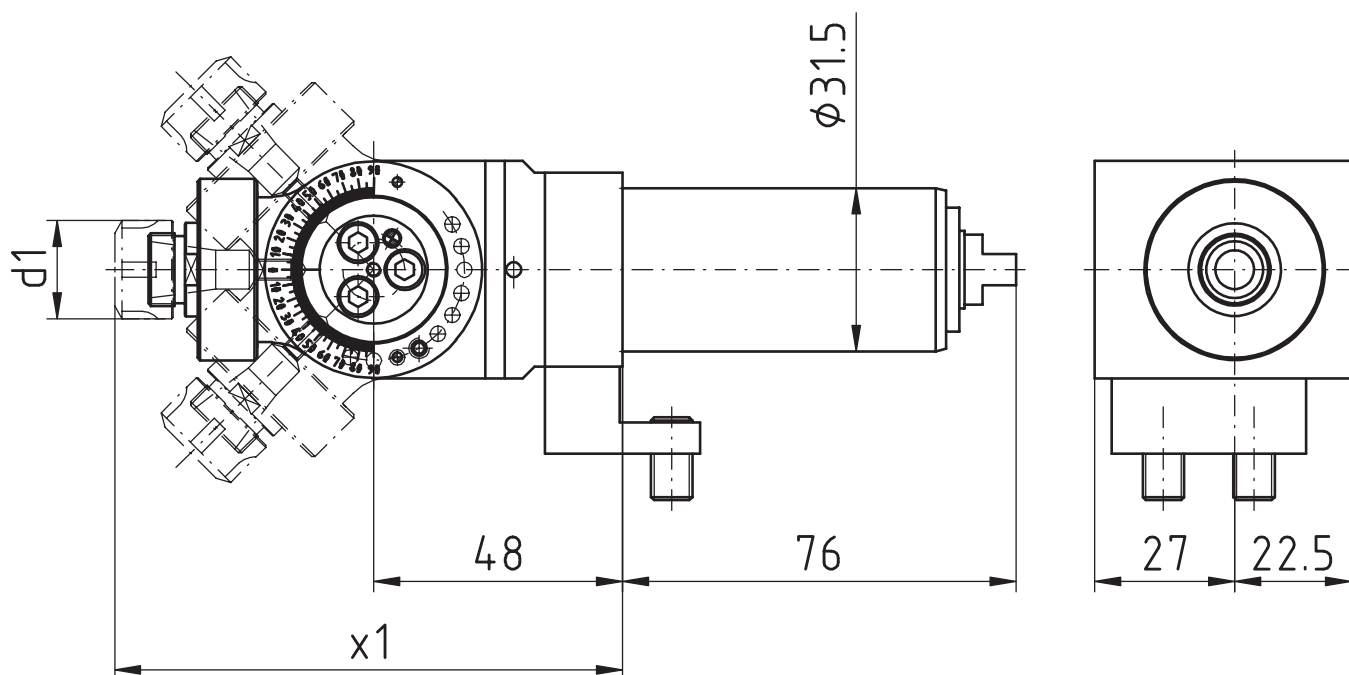
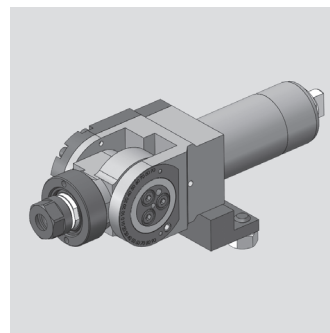
[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x2</b>	<b>x4</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>
30	5,5	78,5	WFB 20-12	3	19.500	1:3			MPU.M31.B20.ZA0.SP42RS

<b>Passend für Maschine:</b>	Sprint 3215	Sprint 42 10 linear
suitable machines:	Sprint 3218	Speed 32 10 linear
approprié pour la machine:	Sprint 42 linear	

# DMG MORI - SPRINT

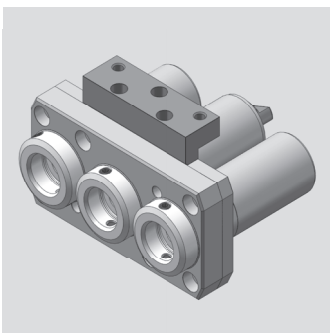
**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>		Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1				i				MPU.Z31.E11.SA0.SP42

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Sprint 3215	Sprint 42110 linear
	Sprint 3218	Speed 32110 linear
	Sprint 42 linear	



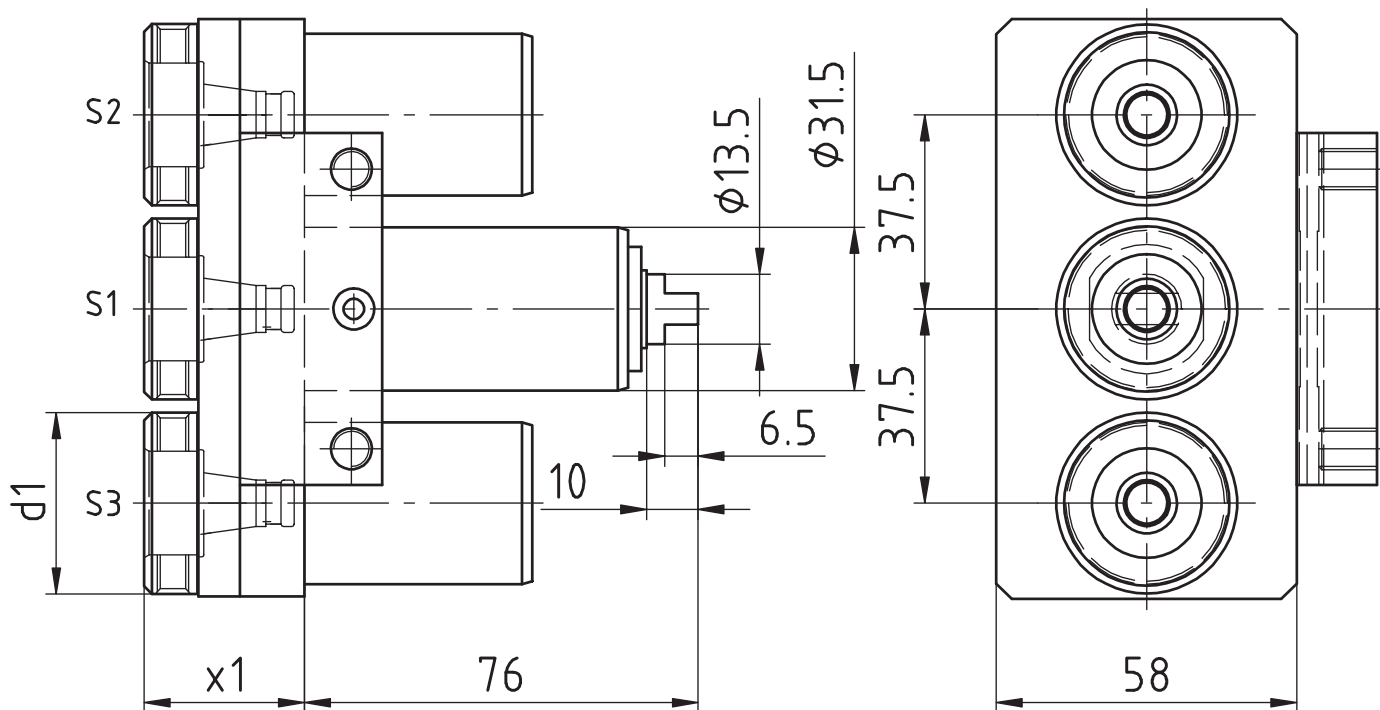
# DMG MORI - SPRINT

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
35	31,5	WFB 20-12	10*	6.500*	1:1*				MPU.Z31.B20.MA0.SP42

Passend für Maschine: sutable machines: approprié pour la machine:	Sprint 3215 Sprint 3218 Sprint 42 linear	Sprint 42 10 linear Speed 32 10 linear
--	--	---

\* S1: 10 Nm/6.500 rpm/i=1:1  
S2: 5 Nm/13.000 rpm/i=1:2  
S3: 5 Nm/13.000 rpm/i=1:2

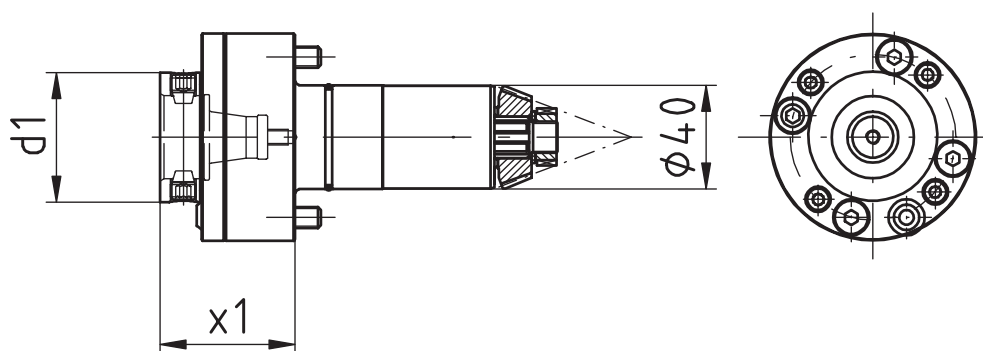
# DMG MORI - SPRINT

## Axial Bohr- und Fräskopf

Axial drilling and milling head

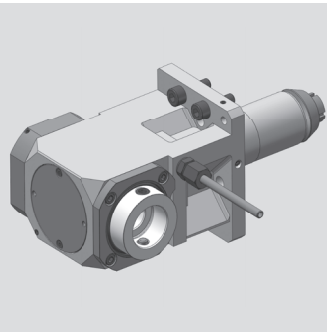
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
50	52	WFB 32-20	20	8.000	1:1	x			MPU.Z40.B32.AA0.GITAL
50	52	WFB 32-20	20	8.000	1:1	x	x	80	MPU.Z40.B32.AE0.GITAL

Passend für Maschine: Sprint 42110 linear  
 suitable machines: Speed 32110 linear  
 approprié pour la machine:



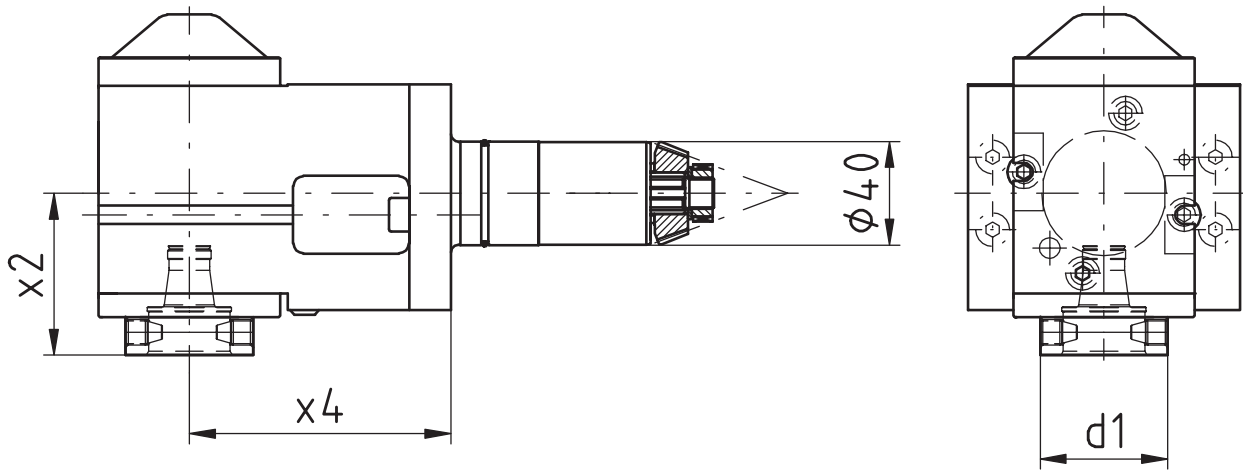
# DMG MORI - SPRINT

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
50	62,5	101	WFB 32-20	70	8.000	1:1	x			MPU.Z40.B32.RA0.GITAL
50	62,5	101	WFB 32-20	70	8.000	1:1	x	x	80	MPU.Z40.B32.RE0.GITAL

**Passend für Maschine:** Sprint 42|10 linear  
 suitable machines: Speed 32|10 linear  
 approprié pour la machine:

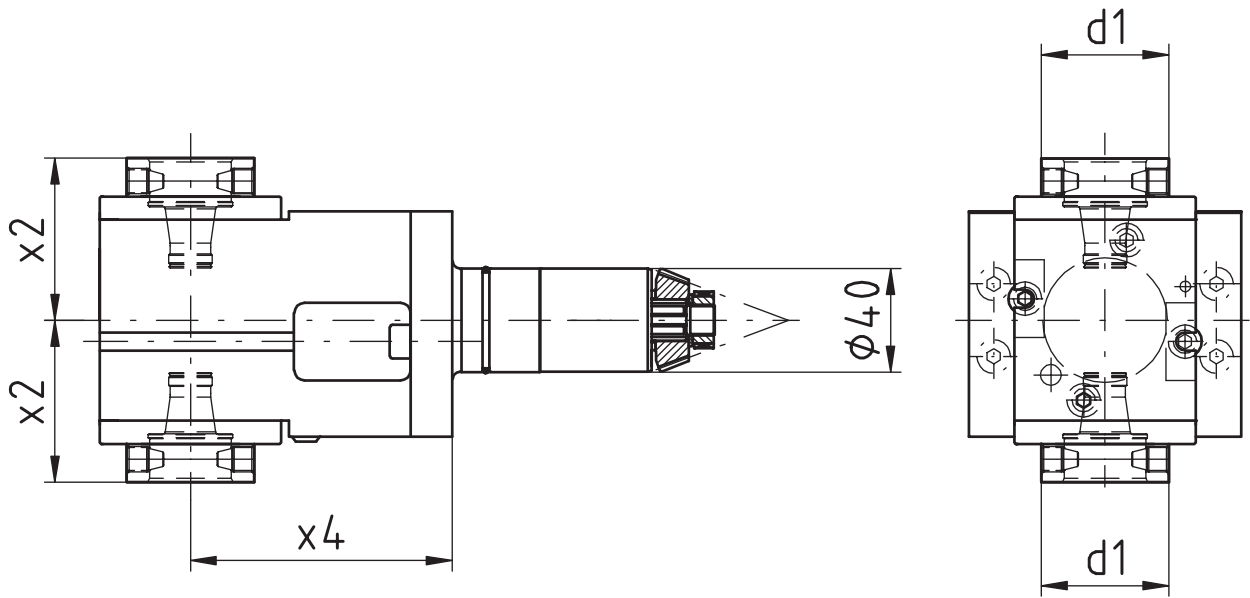
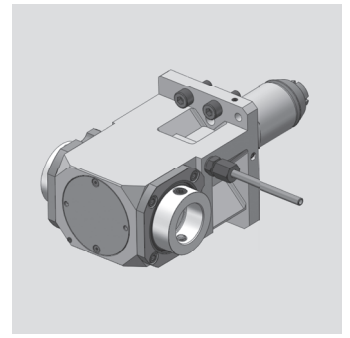
# DMG MORI - SPRINT

## Radial Bohr- und Fräskopf

Radial drilling and milling head

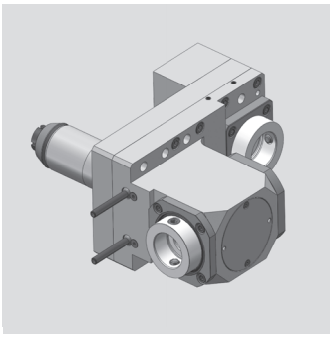
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
50	62,5	101	WFB 32-20	70	8.000	1:1	x			MPU.Z40.B32.2A0.GITAL

**Passend für Maschine:** Sprint 42110 linear  
 suitable machines:  
 approprié pour la machine: Speed 32110 linear



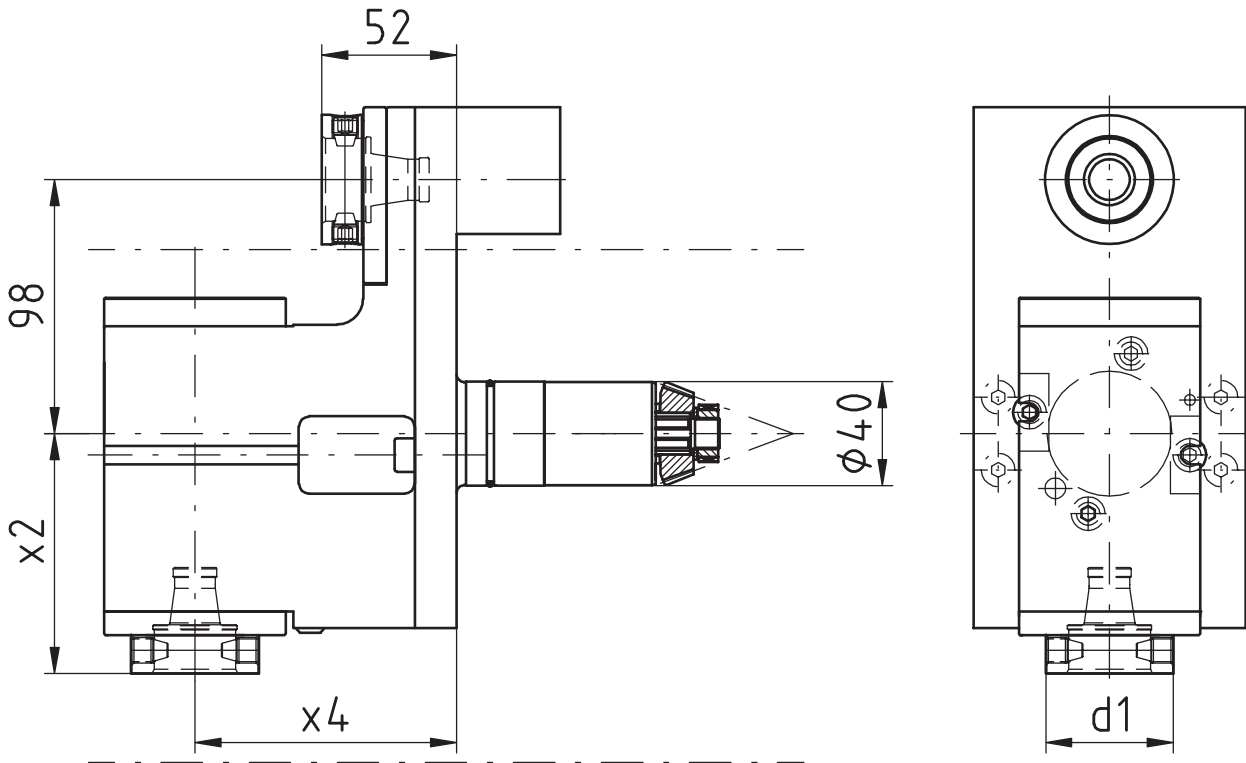
# DMG MORI - SPRINT

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
50	92,5	101	WFB 32-20	70	8.000	1:1	x			MPU.Z40.B32.OA0.GITAL
50	92,5	101	WFB 32-20	70	8.000	1:1	x	x	80	MPU.Z40.B32.OE0.GITAL

<b>Passend für Maschine:</b>	Sprint 42 10 linear
suitable machines:	Speed 32 10 linear
approprié pour la machine:	

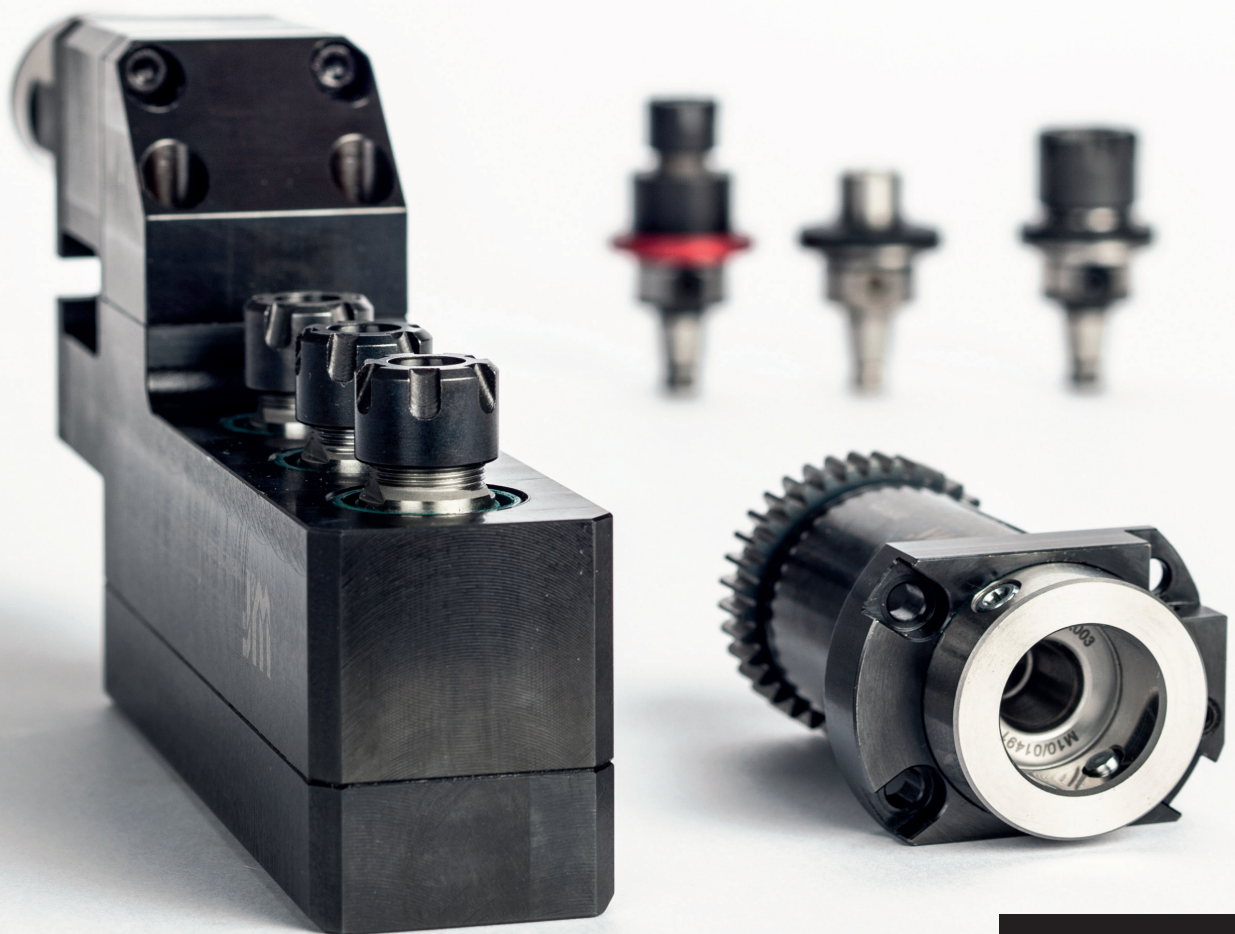


Modulare Aggregatetechnik

Hanwha

**WF**  
&

Werkzeugtechnik



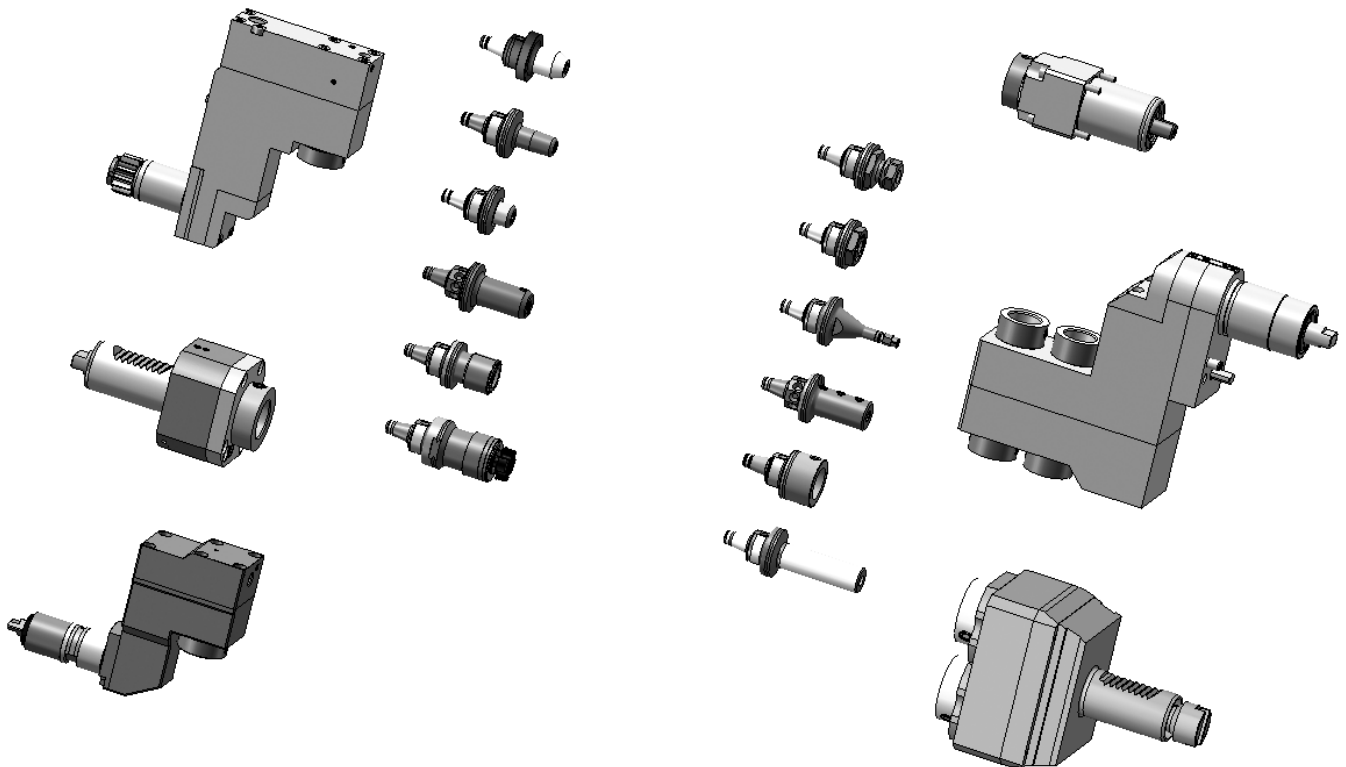
**Katalog  
HA-02**

# W&F

ph HORN ph

## WFB-Adapterpool

Indications for the customer



Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindel-drehen ein durchgängiges modulares Werkzeug-system einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.

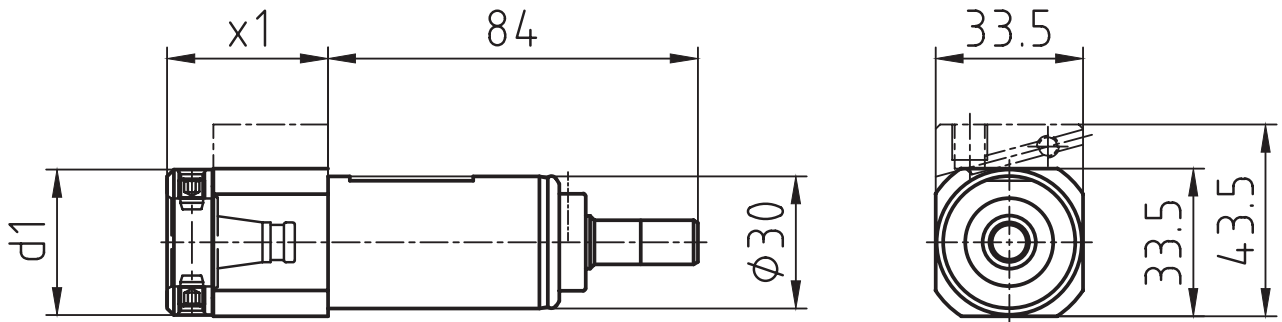
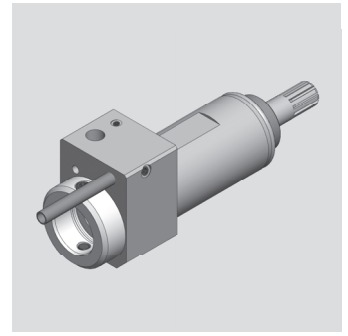
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## Axial Bohr- und Fräskopf

Axial drilling and milling head

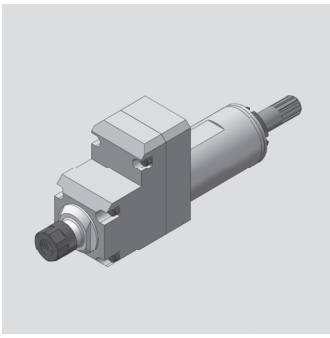
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
33	36,5	WFB 20-12	10	5.000	1:1				MPU.Z30.B20.AA0.XD20S
33	36,5	WFB 20-12	10	5.000	1:1	x	x	80	MPU.Z30.B20.AE0.XD20S

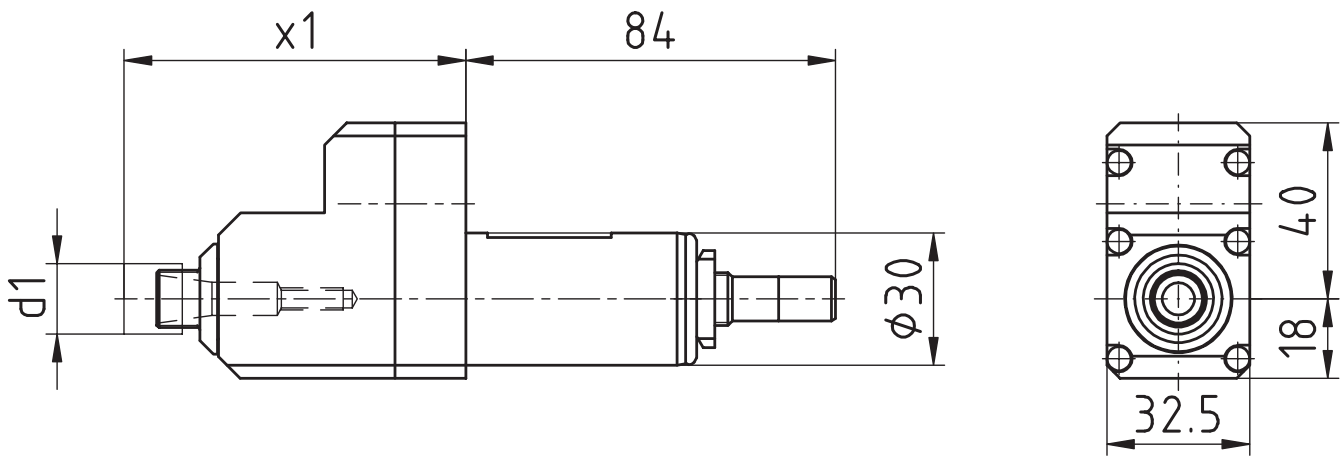
Passend für Maschine:	XD20
suitable machines:	XD26
approprié pour la machine:	



# Hanwha

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11 MINI	3	15.000	1:3			MPU.Z30.E11.BA0.XD20

<b>Passend für Maschine:</b>	XD20
suitable machines:	XD26
approprié pour la machine:	

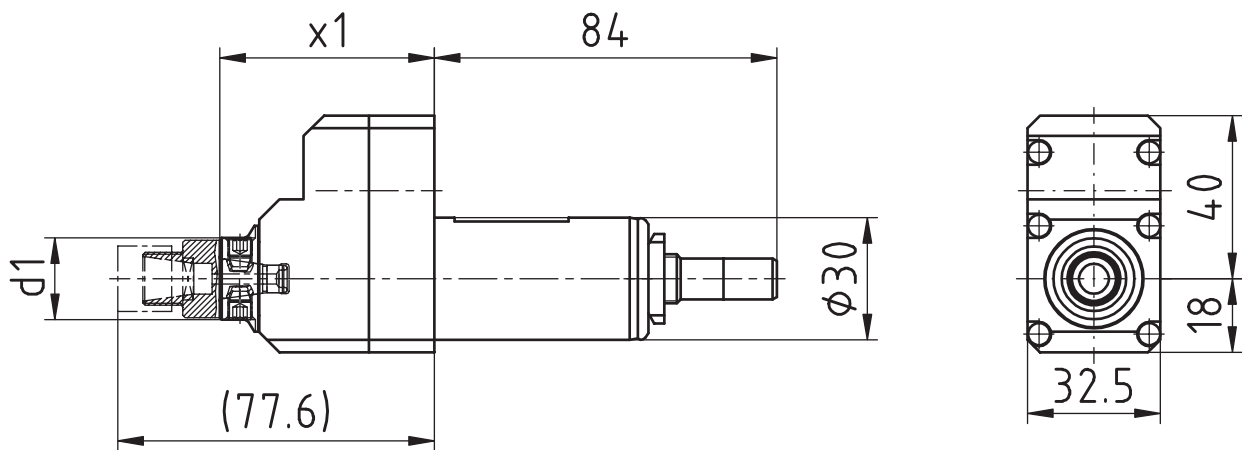
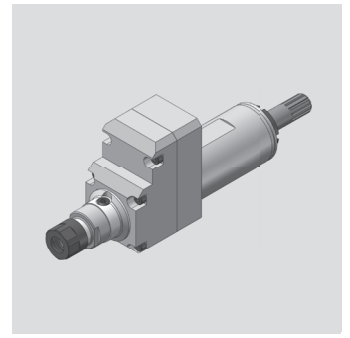
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

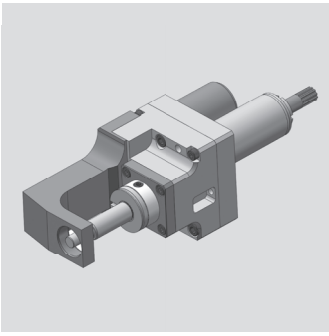
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
20	52,6	WF-Micro	3	15.000	1:3				MPU.Z30.WFM.BA0.XD20

Passend für Maschine:	XD20
suitable machines:	XD26
approprié pour la machine:	XD26



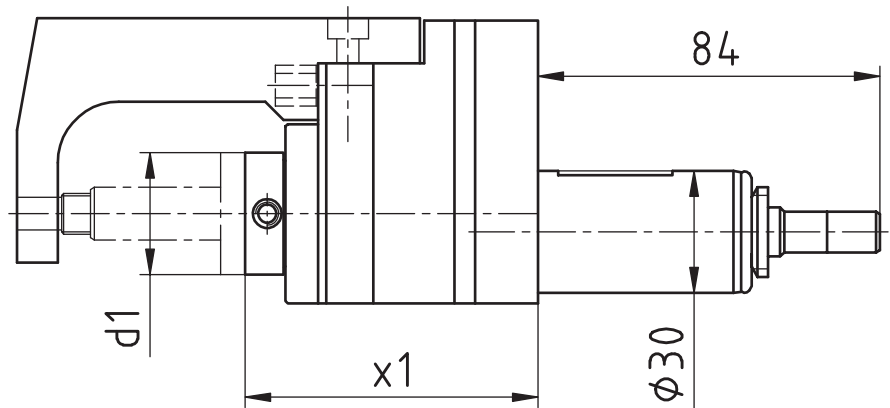
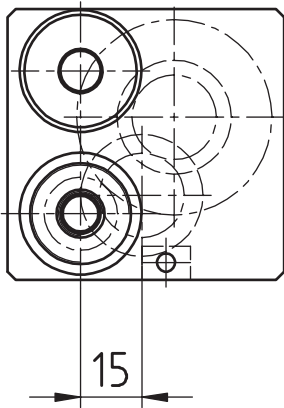
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1	WFK 20-12	13	1.872	2,67:1				MPU.Z30.B20.CA0.XD20

<b>Passend für Maschine:</b>	XD20
suitable machines:	XD26
approprié pour la machine:	

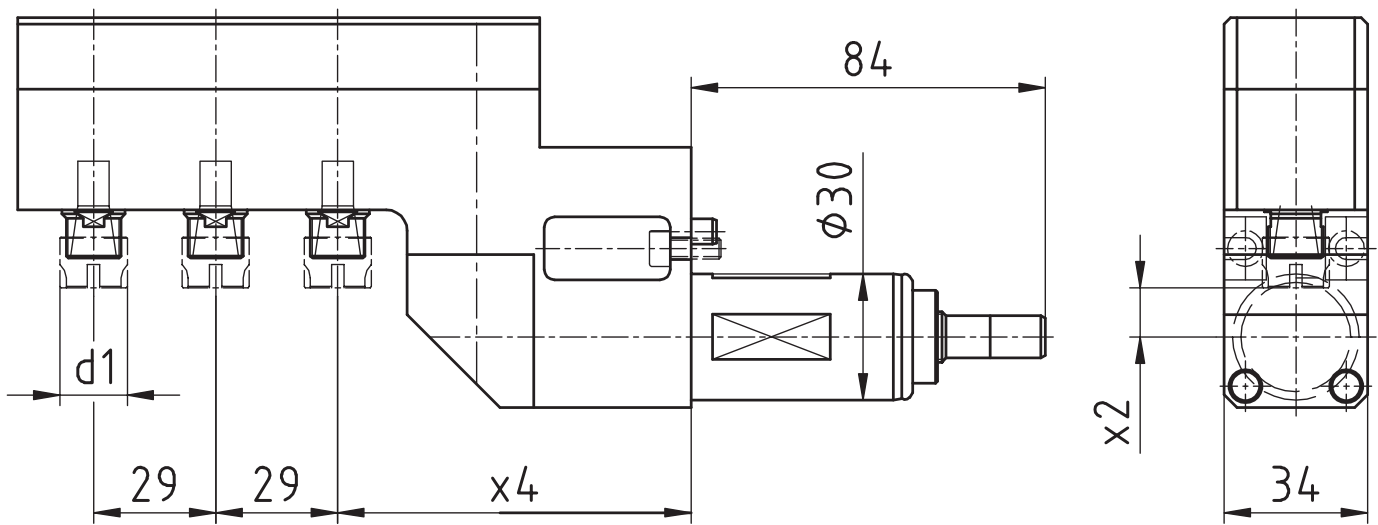
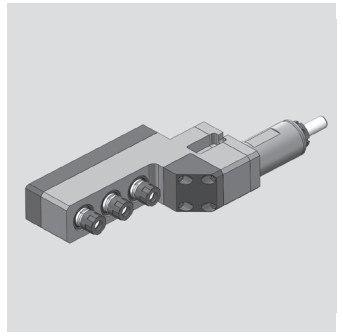
# Hanwha

## Radial Bohr- und Fräskopf

Radial drilling and milling head

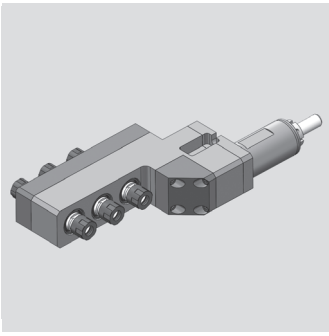
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	ER11 MINI	3	5.000	1:1				MPU.Z30.E11.3A0.XD20

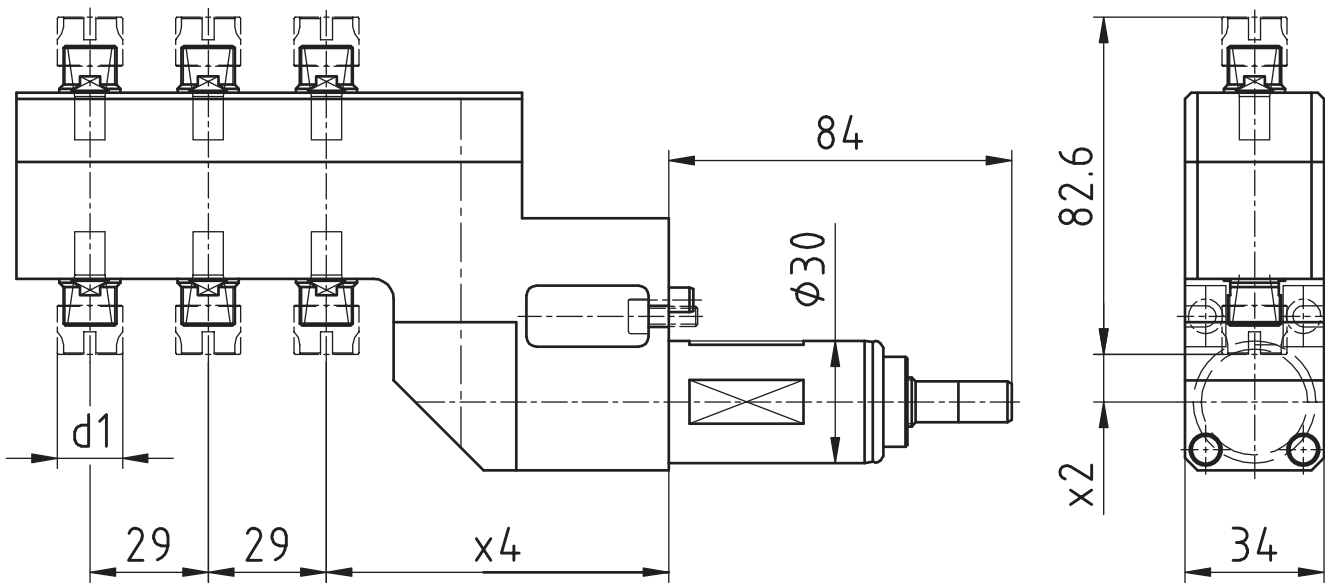
Passend für Maschine:	XD20
suitable machines:	XD26
approprié pour la machine:	



# Hanwha

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	ER11 MINI	3	5.000	1:1			MPU.Z30.E11.6A0.XD20

<b>Passend für Maschine:</b>	XD20
suitable machines:	XD26
approprié pour la machine:	



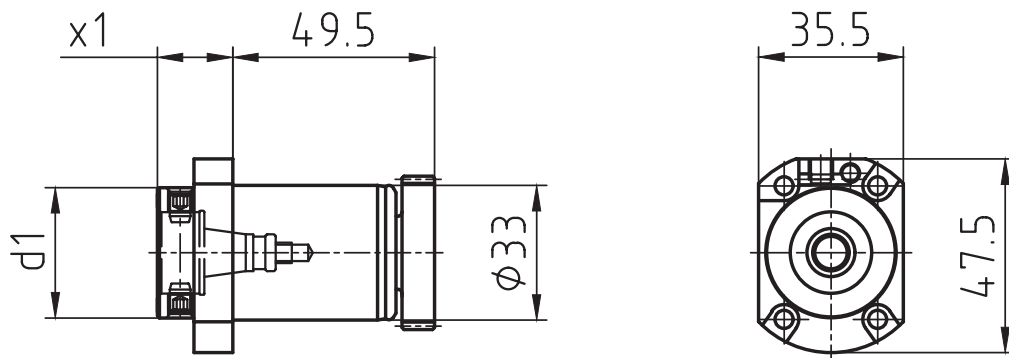
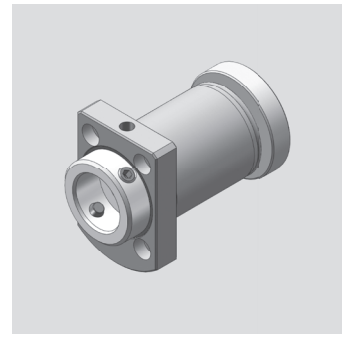
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

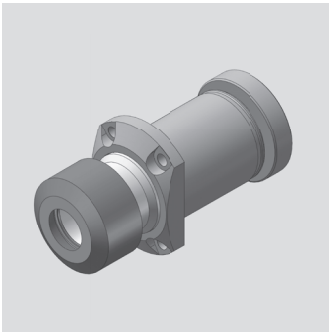
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>		Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>				<b>i</b>				
33	18,5	WFB 20-12	10	8.000	1:1				MPU.Z33.B20.AA0.XD20S
33	18,5	WFB 20-12	10	8.000	1:1	x	x	20	MPU.Z33.B20.AE0.XD20S

<b>Passend für Maschine:</b>	XD20
suitable machines:	XD26
approprié pour la machine:	



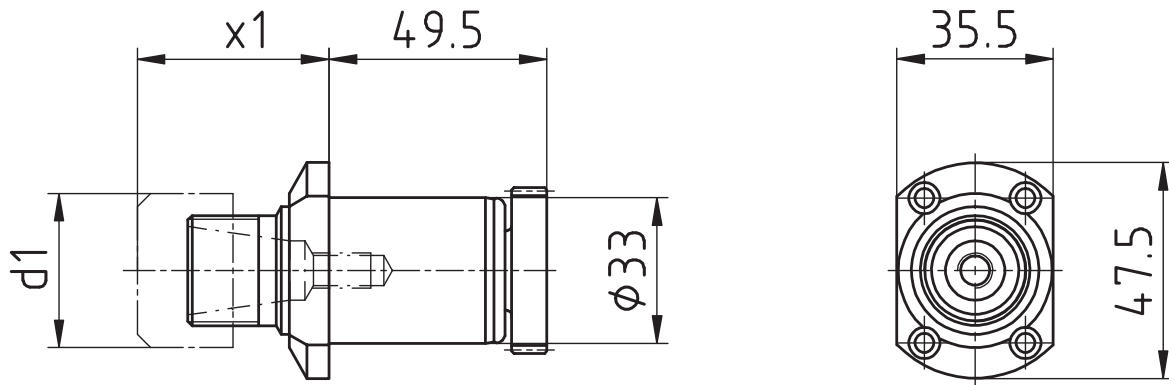
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
35	43,5	ER20	10	8.000	1:1			MPU.Z33.E20.AA0.XD20S

Passend für Maschine:	XD20
suitable machines:	XD26
approprié pour la machine:	

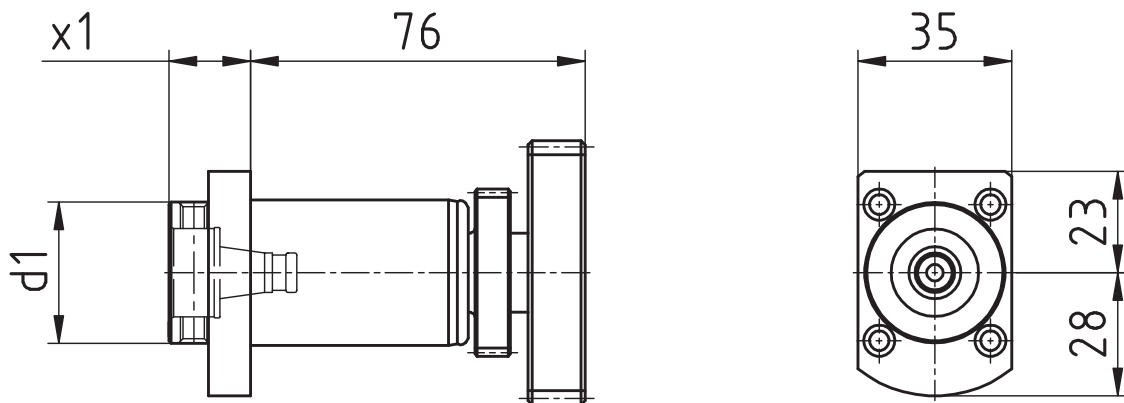
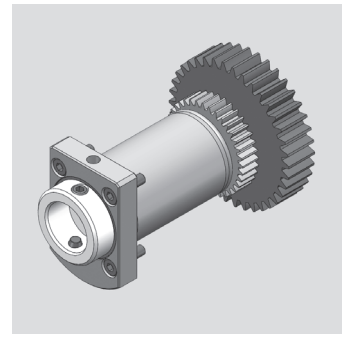
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

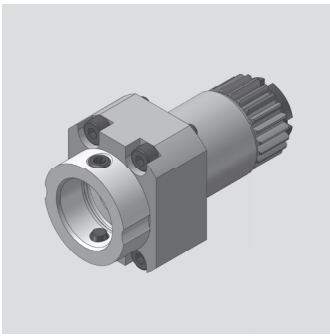
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>		Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>			<b>i</b>					
32	18,5	WFB 20-12	10	8.000	1:1				MPU.Z33.B20.AA0.XD20L1
32	18,5	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z33.B20.AE0.XD20L1

<b>Passend für Maschine:</b>	XD20
suitable machines:	XD26
approprié pour la machine:	



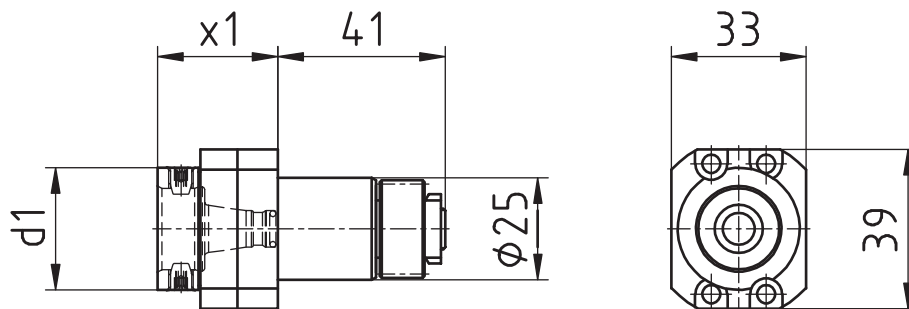
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	8	8.000	1:1			MPU.Z25.B20.AA0.XE20

<b>Passend für Maschine:</b>	XE20
suitable machines:	
approprié pour la machine:	

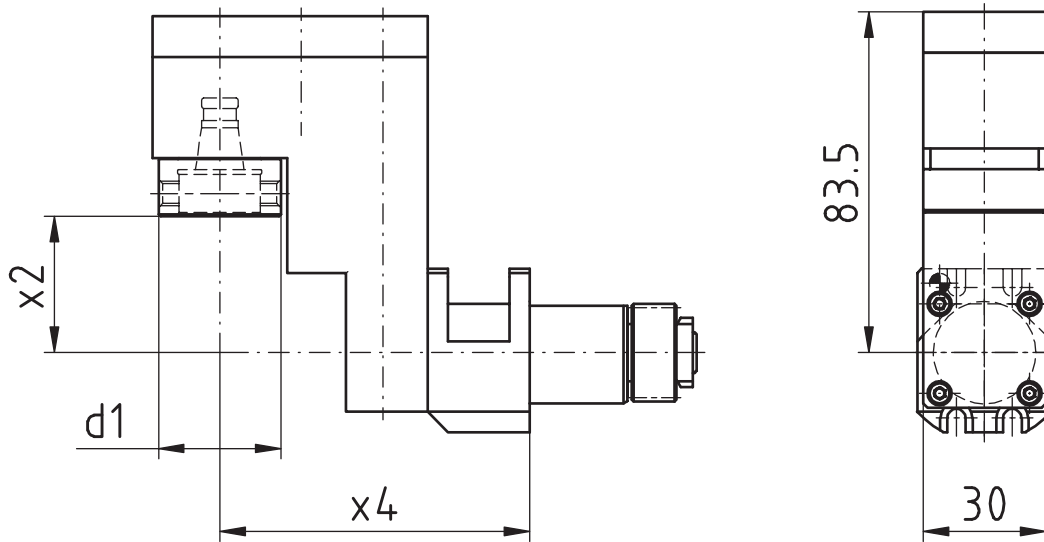
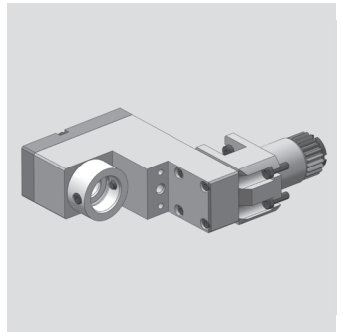
# Hanwha

## Radial Bohr- und Fräskopf

Radial drilling and milling head

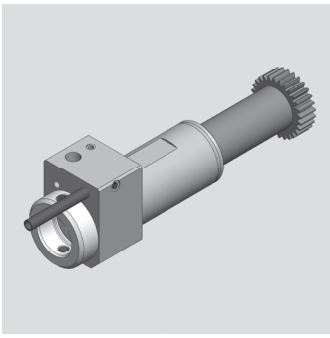
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4				i				
30	33,4	76	WFB 20-12	10	8.000	1:1				MPU.Z25.B20.VA0.XD20V

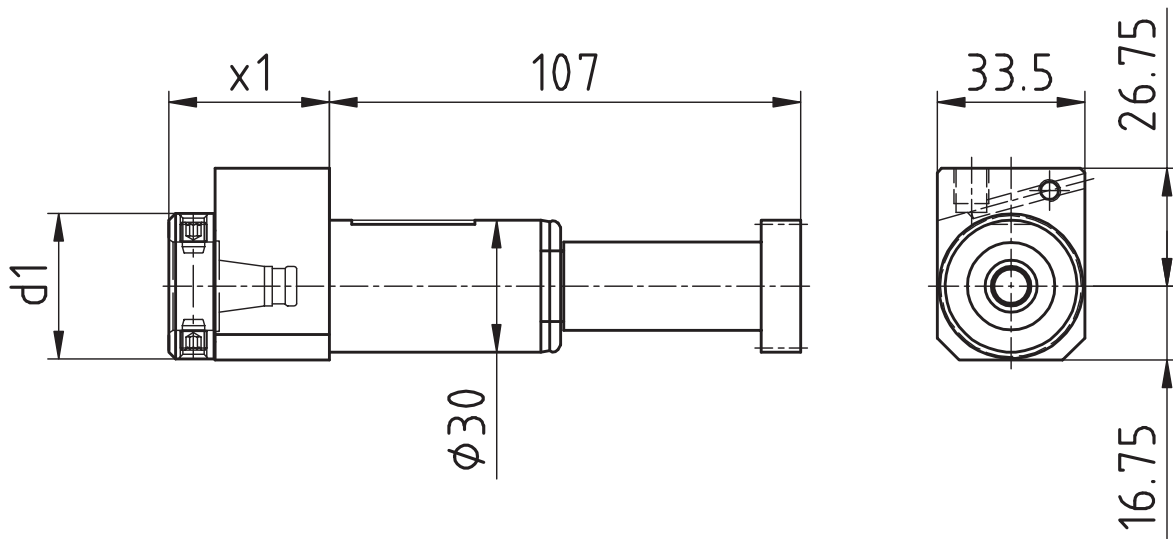
Passend für Maschine: XD20V  
 suitable machines:  
 approprié pour la machine:



# Hanwha

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	10	5.000	1:1	x	x	80	MPU.Z30.B20.AE0.XE20

<b>Passend für Maschine:</b>	XE20
suitable machines:	
approprié pour la machine:	

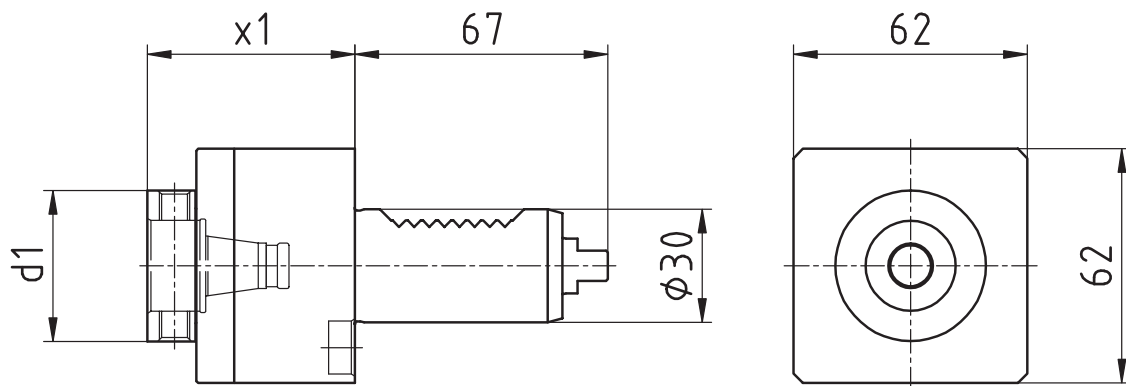
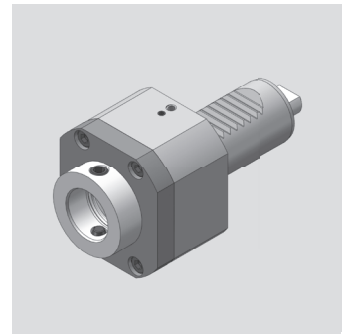
# Hanwha

## Axial Bohr- und Fräskopf

Axial drilling and milling head

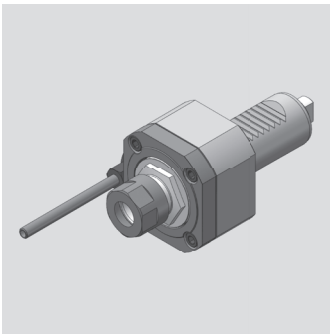
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
40	55	WFB 24-16	10	8.000	1:1	x			MPU.M30.B24.AA0.STL
40	55	WFB 24-16	10	8.000	1:1	x	x	80	MPU.M30.B24.AE0.STL

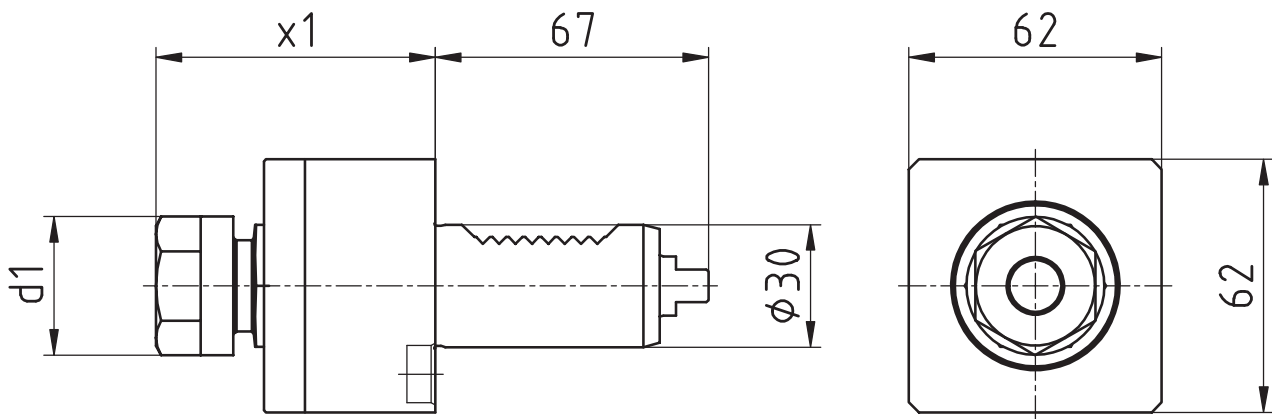
Passend für Maschine: STL  
 suitable machines:  
 approprié pour la machine:



# Hanwha

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER20	10	8.000	1:1	x			MPU.M30.E20.AA0.STL

<b>Passend für Maschine:</b>	STL
suitable machines:	
approprié pour la machine:	



Modulare Aggregatetechnik

Maier



Werkzeugtechnik



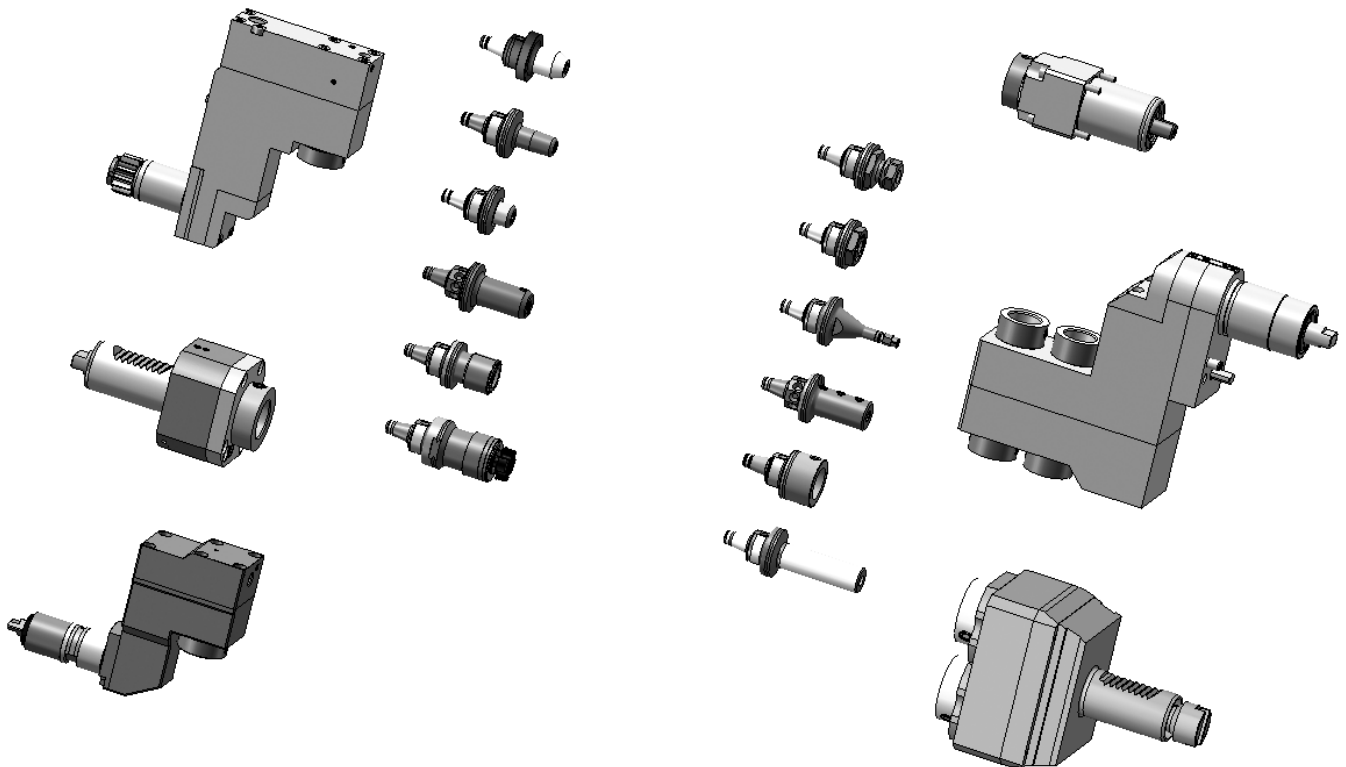
Katalog  
MA-02

# W&F

ph HORN ph

## WFB-Adapterpool

Indications for the customer



Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindel-drehen ein durchgängiges modulares Werkzeugsystem einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.

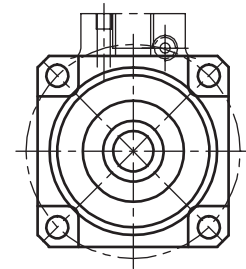
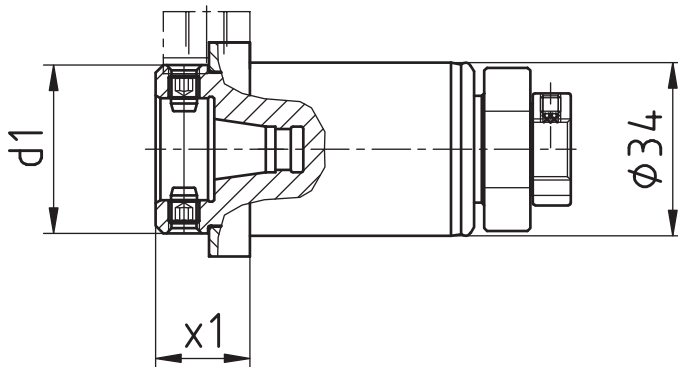
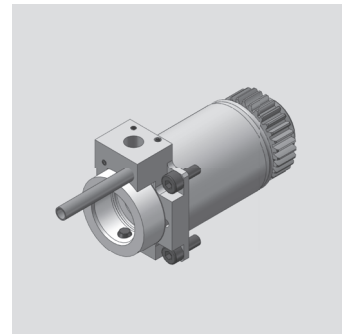
# Maier

## Axial Bohr- und Fräskopf

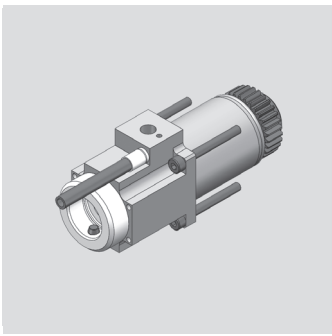
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
33	18,5	WFB 20-12	10	10.000	1:1				MPU.Z34.B20.AA0.MAIS
33	18,5	WFB 20-12	10	10.000	1:1	x	x	80	MPU.Z34.B20.AE0.MAIS



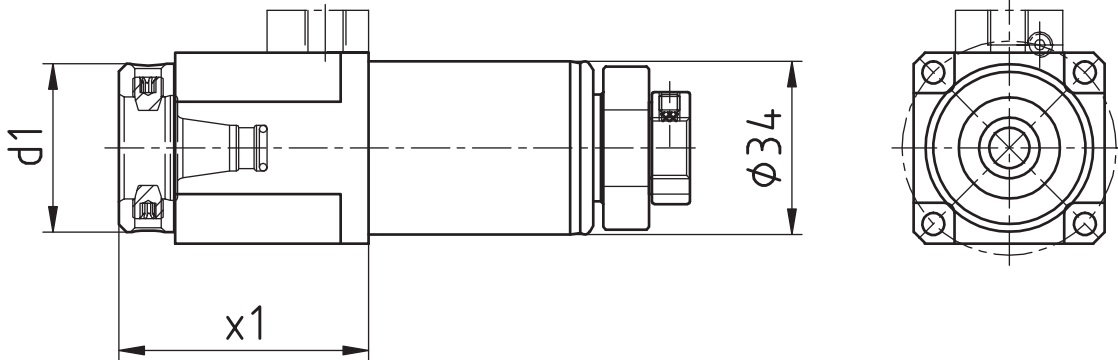
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>								
33	50	WFB 20-12	10	10.000	1:1				MPU.Z34.B20.AA0.2131S
33	50	WFB 20-12	10	10.000	1:1	x	x	80	MPU.Z34.B20.AE0.2131S

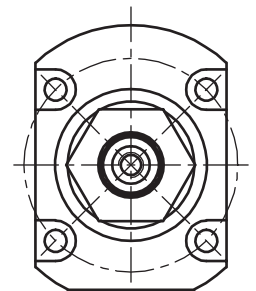
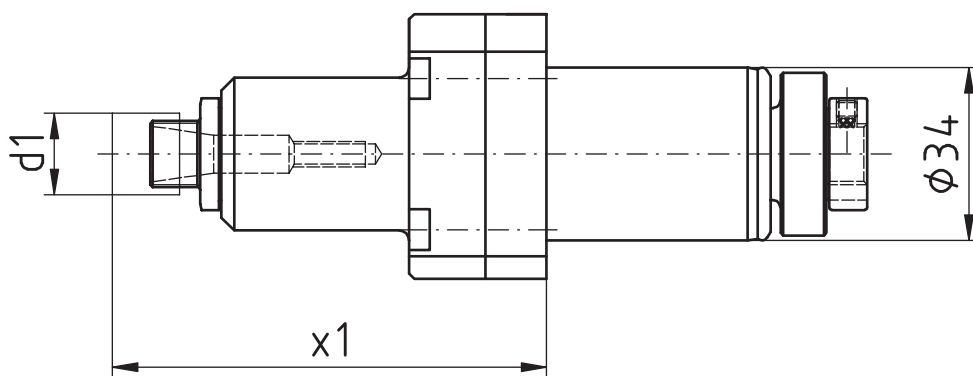
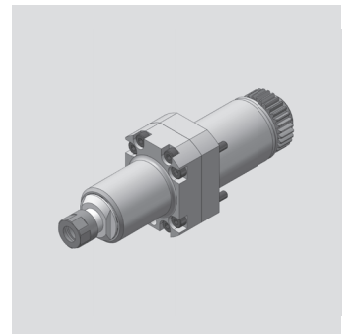
# Maier

## Axial Bohr- und Fräskopf

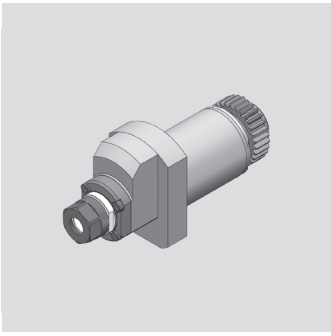
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
16	85,4	ER11 MINI	3	24.000	1:2,4				MPU.Z34.E11.BA0.MAIS



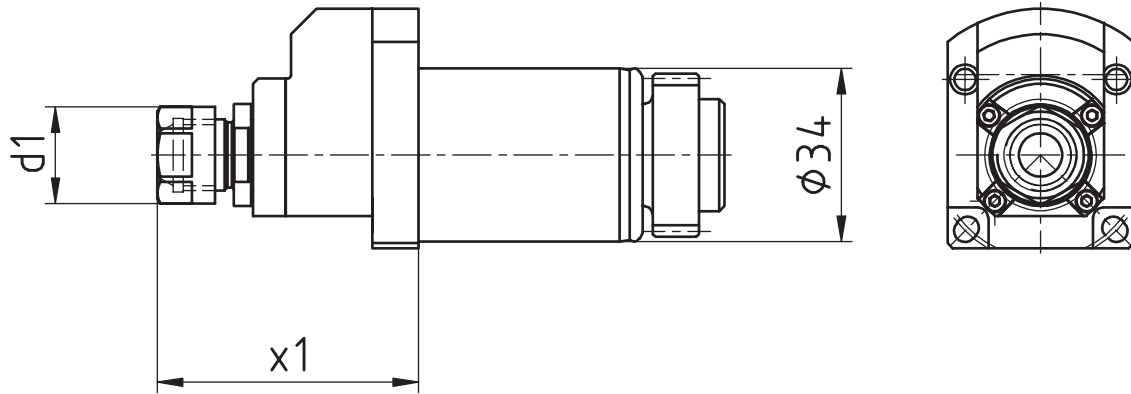
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	2	32.000	1:4				MPU.Z34.E11.BA0.MAIS4

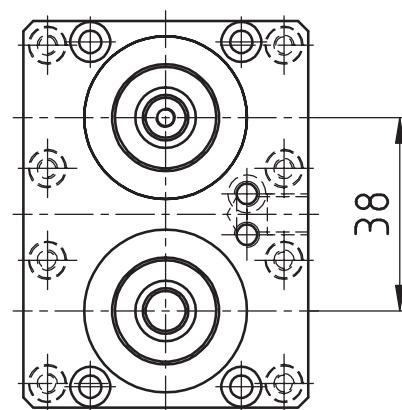
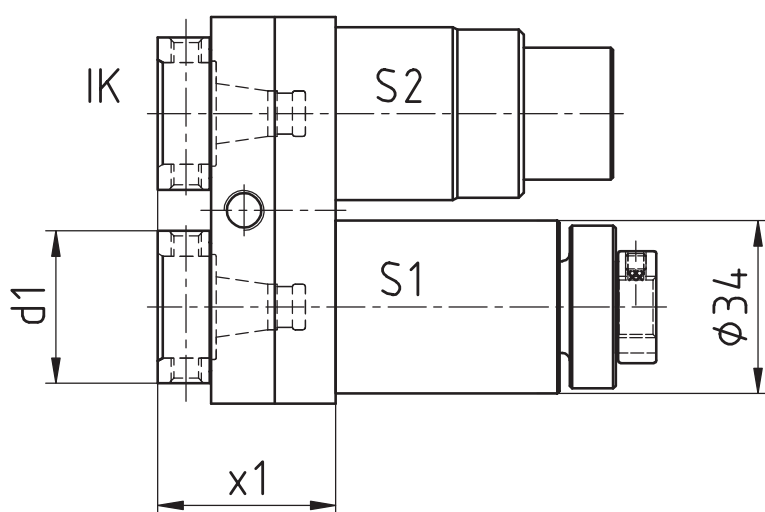
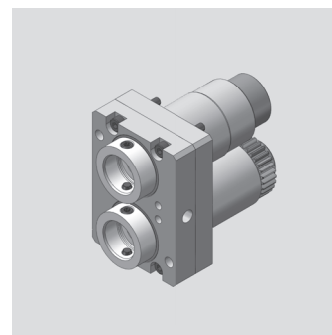
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

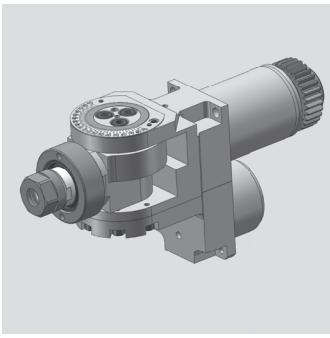
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>		Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>			<b>i</b>					
30	35	WFB 20-12	10*	10.000*	1:1*	x	x	80	MPU.Z34.B20.ME0.MAIS

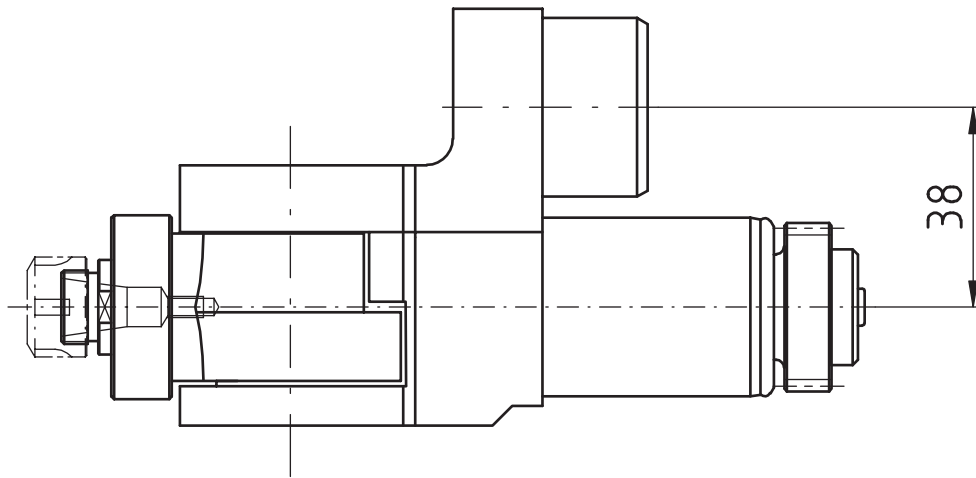
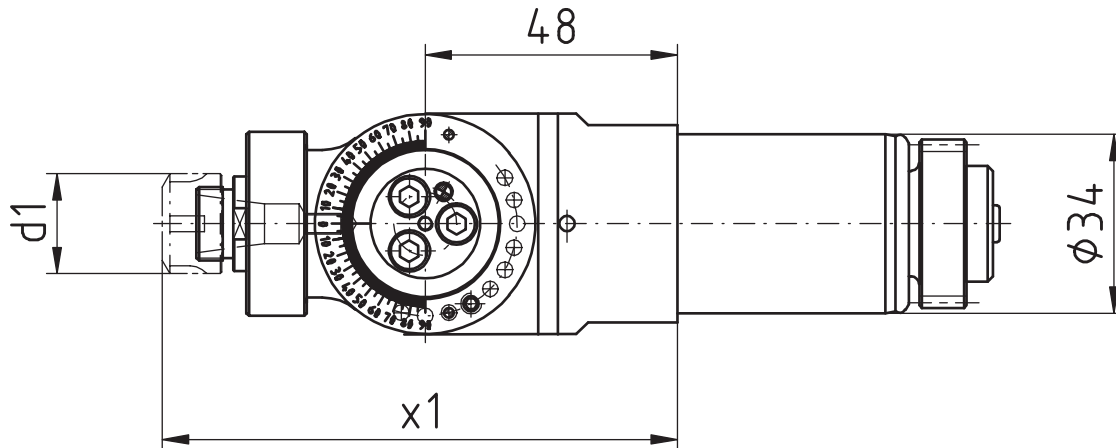
\* S1: 10 Nm/10.000 rpm/i=1:1  
S2: 7 Nm/15.000 rpm/i=1:1,5



# Maier

**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1	ER11	5	10.000	1:1				MPU.Z34.E11.SA0.MAIS



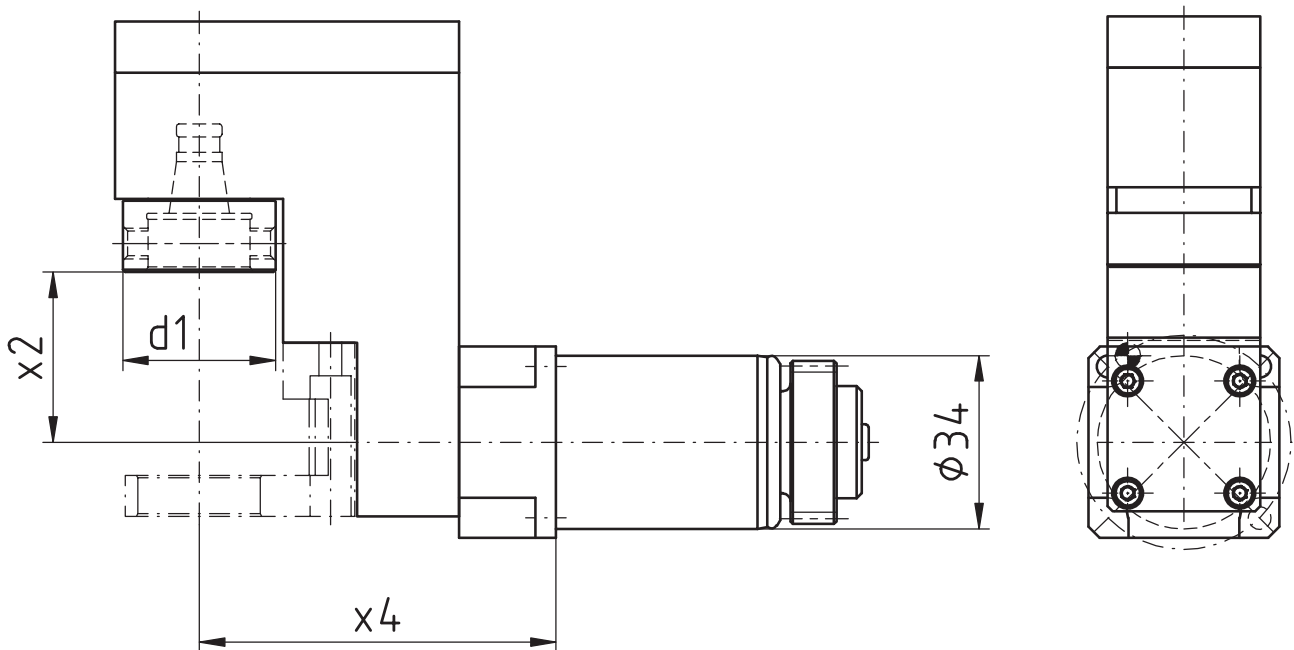
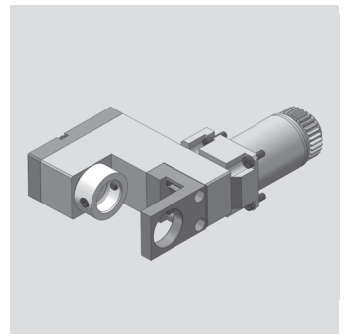
# Maier

## Radial Bohr- und Fräskopf

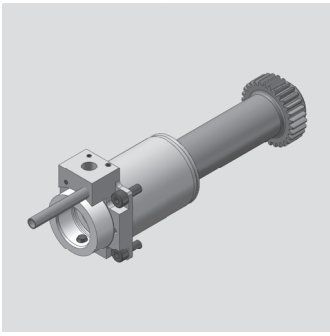
Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	6	10.000	1:1				MPU.Z34.B20.VA0.MAIS



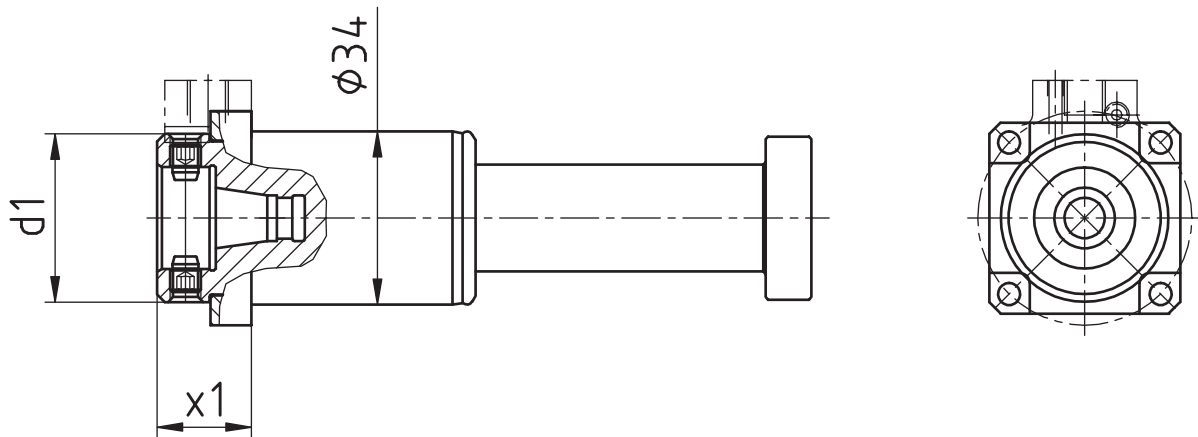
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
33	18,5	WFB 20-12	10	10.000	1:1				MPU.Z34.B20.AA0.MAISL
33	18,5	WFB 20-12	10	10.000	1:1	x	x	80	MPU.Z34.B20.AE0.MAISL

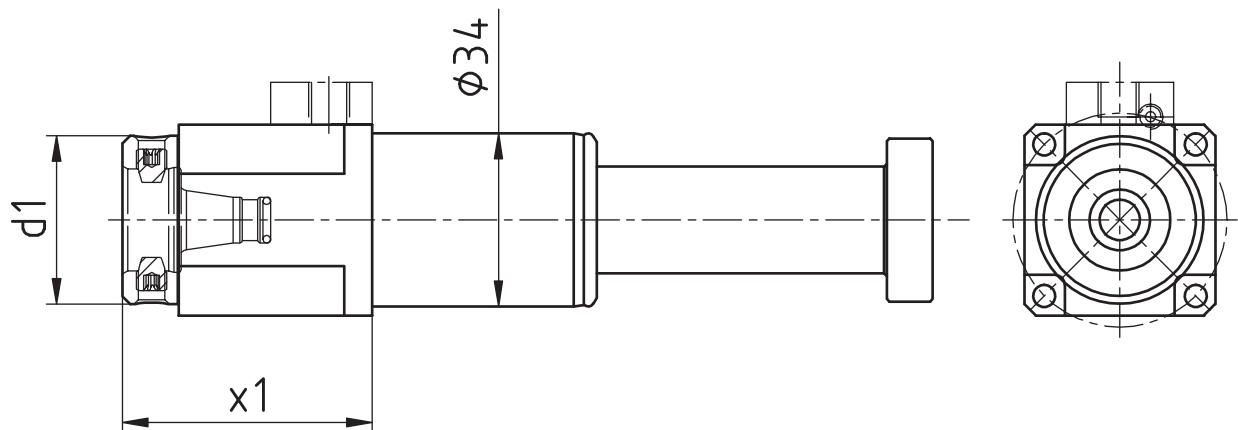
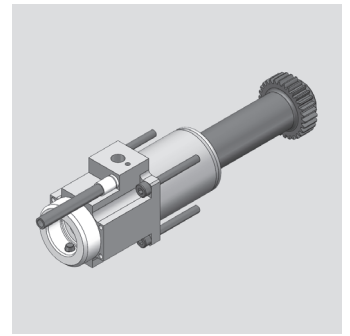
# Maier

## Axial Bohr- und Fräskopf

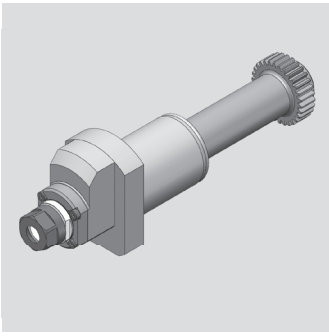
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



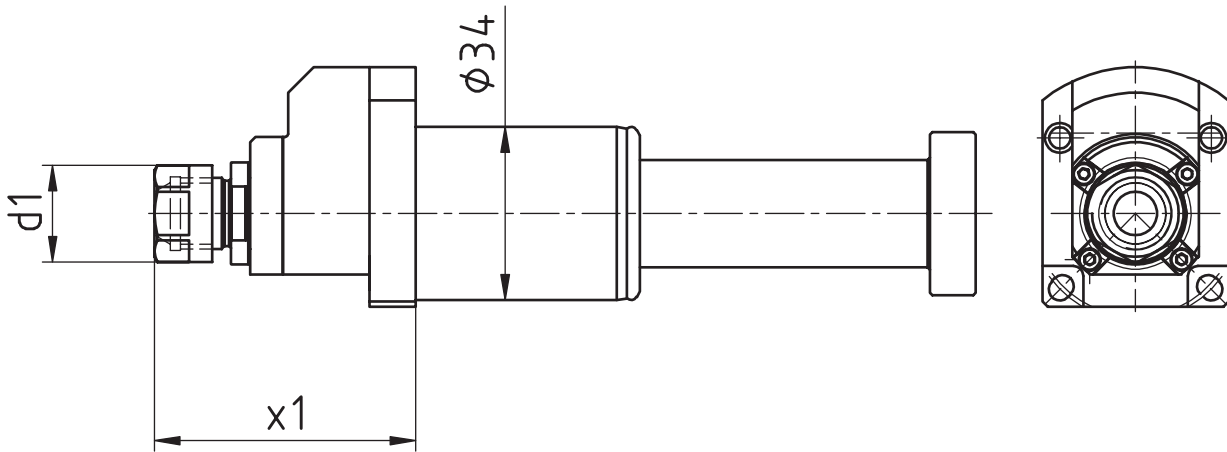
[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
33	50	WFB 20-12	10	10.000	1:1				MPU.Z34.B20.AA0.2131SL
33	50	WFB 20-12	10	10.000	1:1	x	x	80	MPU.Z34.B20.AE0.2131SL



# Maier

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**

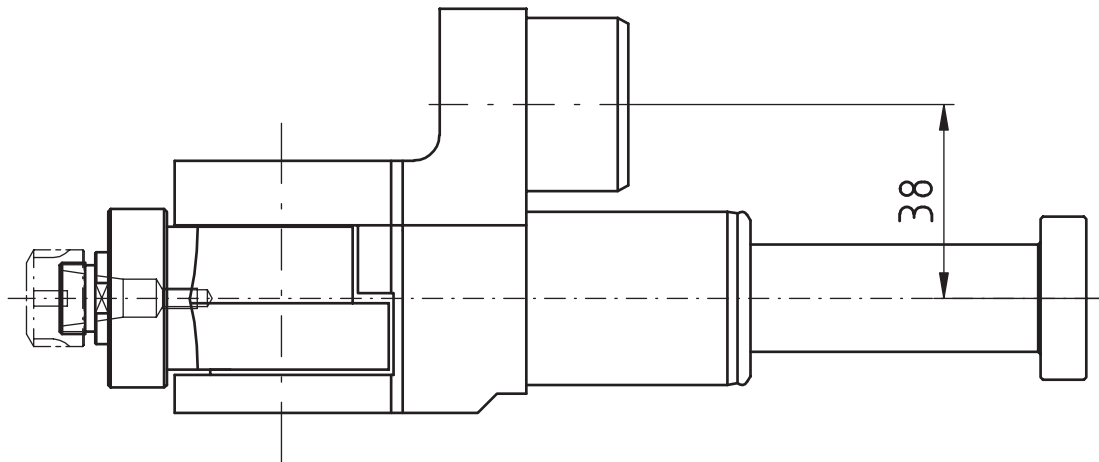
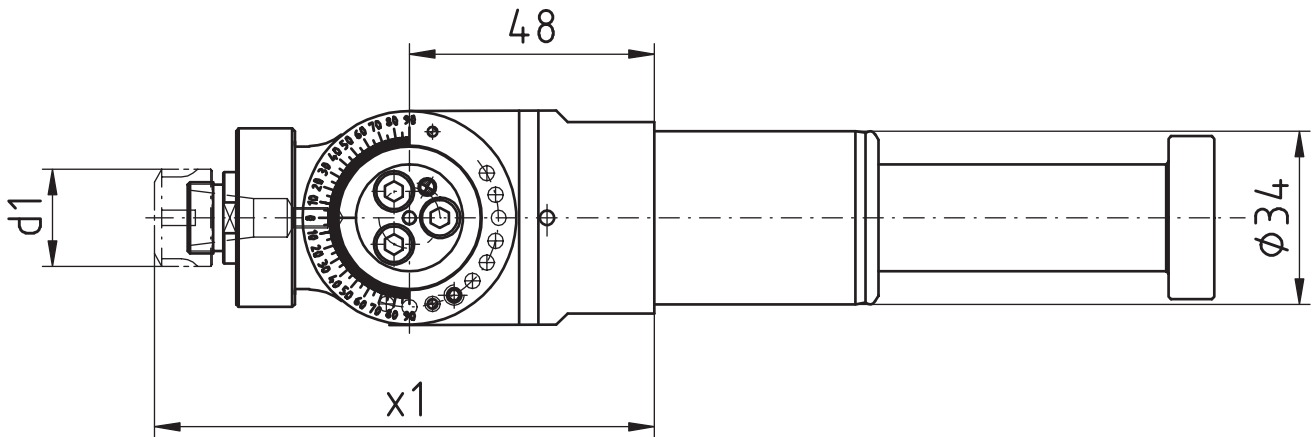
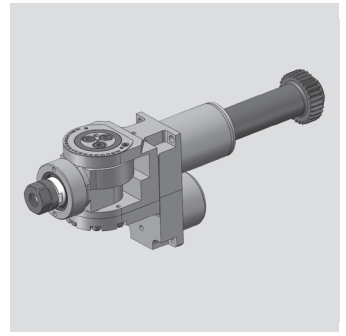


[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	2	32.000	1:4				MPU.Z34.E11.BA0.MAISL4

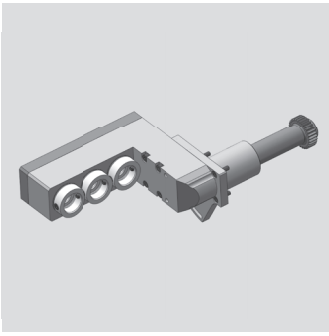
# Maier

**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



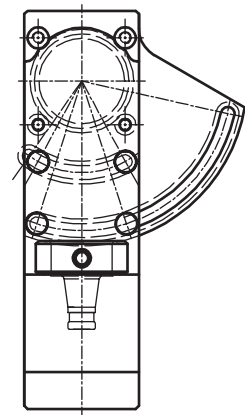
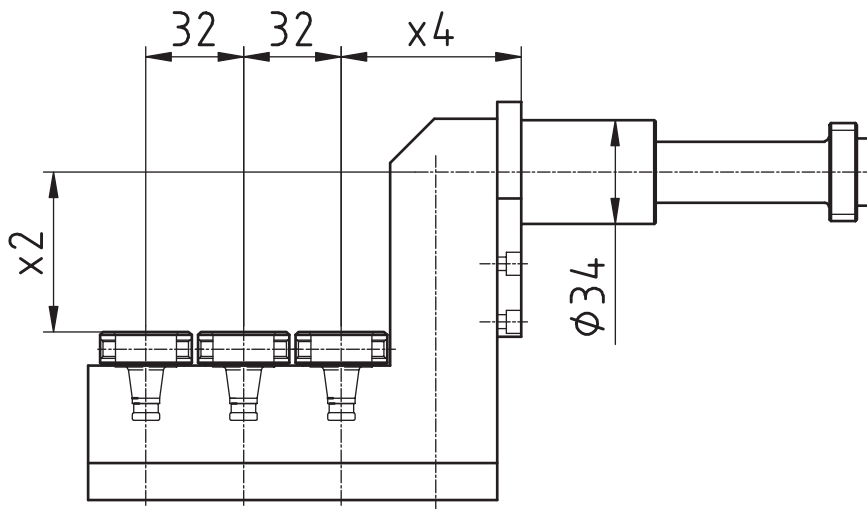
[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	5	10.000	1:1				MPU.Z34.E11.SA0.MAISL



# Maier

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x2</b>	<b>x4</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	52,3	59	WFB 20-12	3	10.000	1:1			MPU.Z34.B20.3A0.MAISL

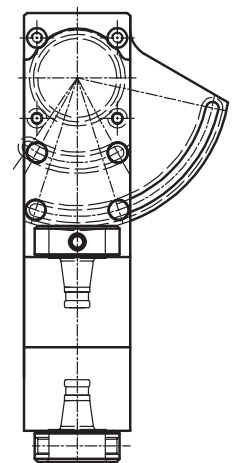
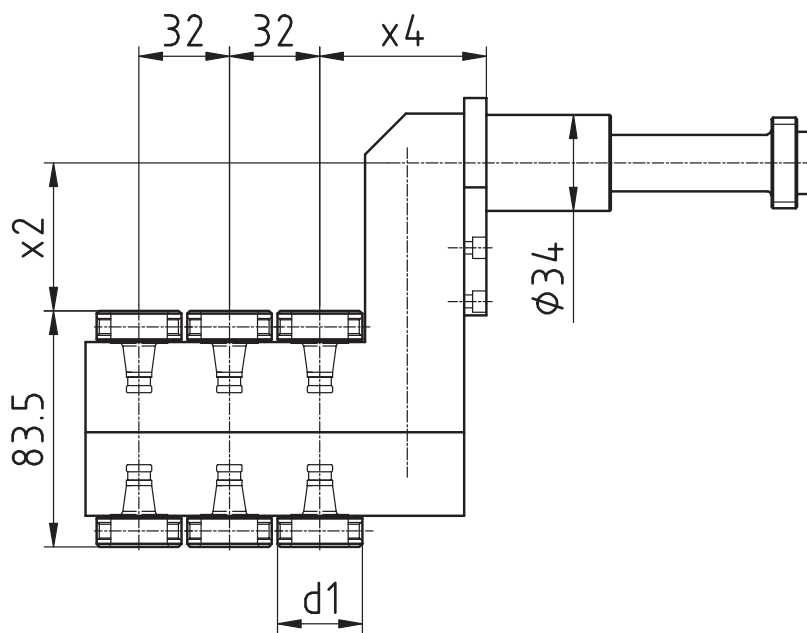
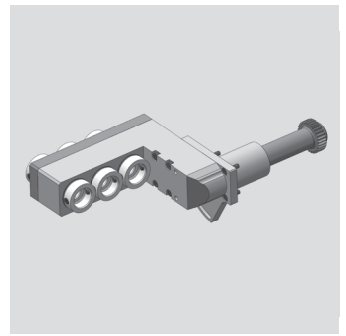
# Maier

## Radial Bohr- und Fräskopf

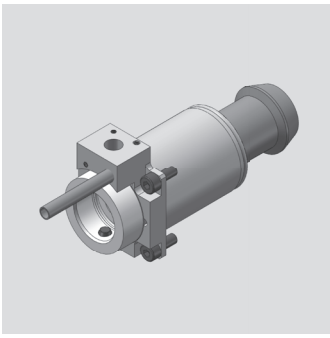
Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
30	52,3	59	WFB 20-12	3	10.000	1:1				MPU.Z34.B20.6A0.MAISL



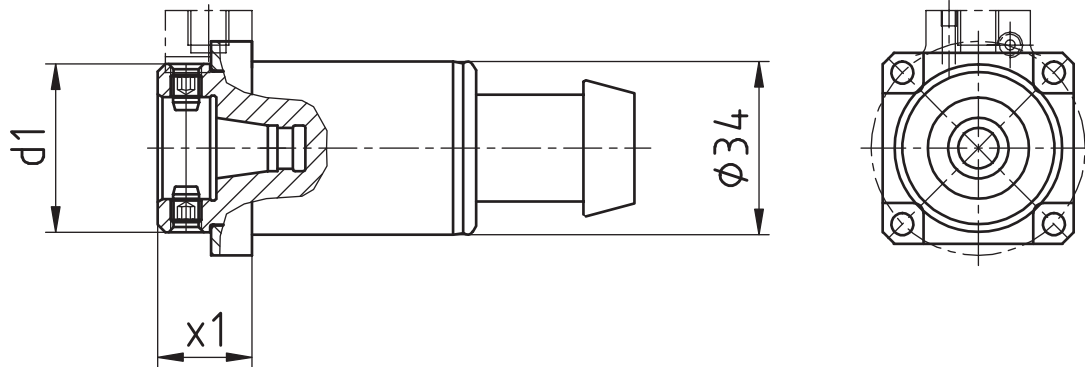
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
33	18,5	WFB 20-12	10	10.000	1:1				MPU.Z34.B20.AA0.MAIK
33	18,5	WFB 20-12	10	10.000	1:1	x	x	80	MPU.Z34.B20.AE0.MAIK



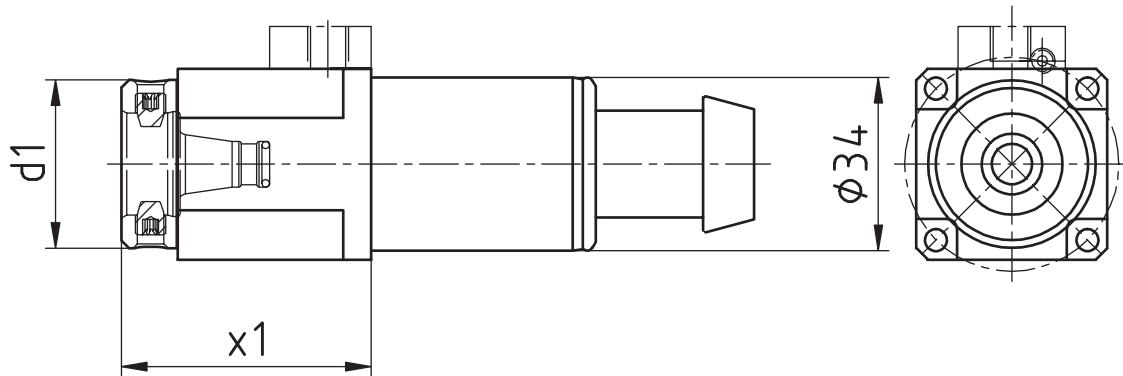
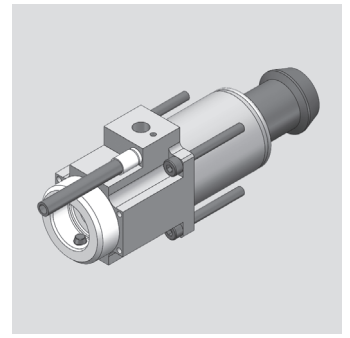
# Maier

## Axial Bohr- und Fräskopf

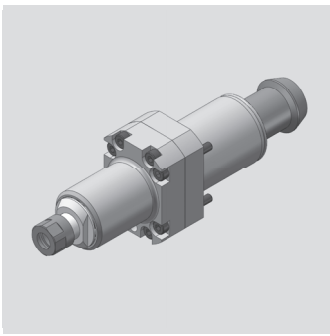
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1				i				
33	50	WFB 20-12	10	10.000	1:1				MPU.Z34.B20.AA0.2131K
33	50	WFB 20-12	10	10.000	1:1	x	x	80	MPU.Z34.B20.AE0.2131K



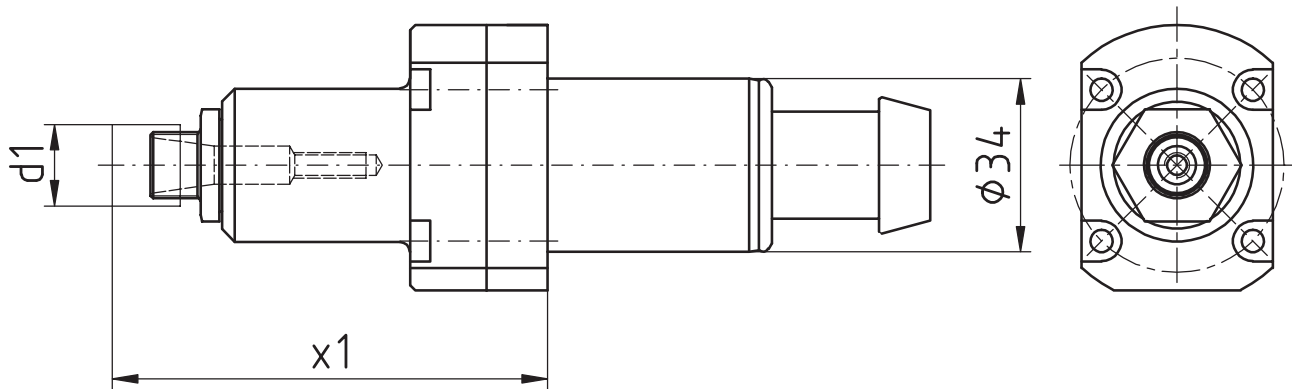
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11 MINI	3	24.000	1:2,4				MPU.Z34.E11.BA0.MAIK

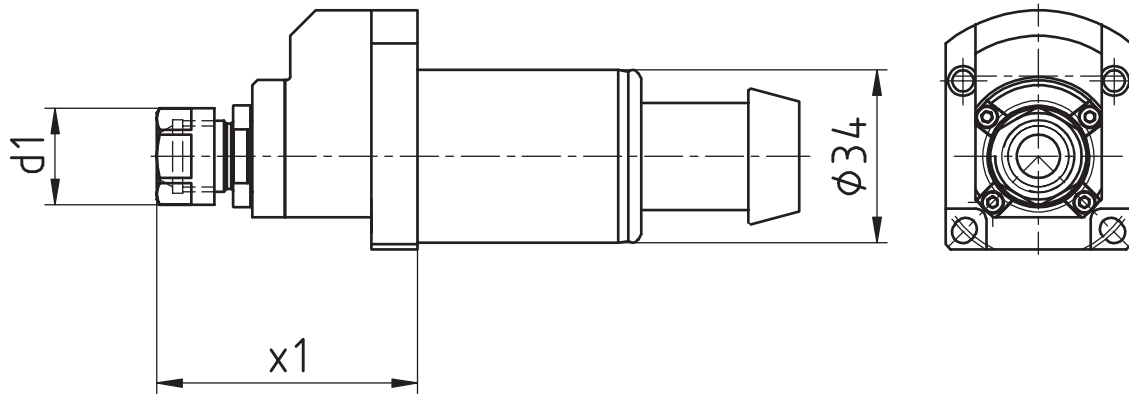
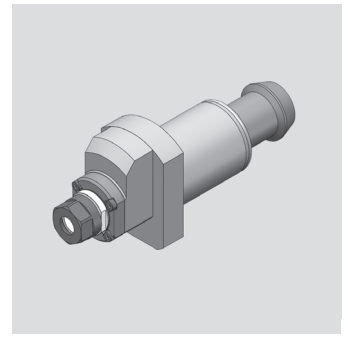
# Maier

## Axial Bohr- und Fräskopf

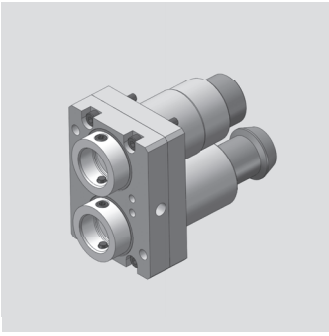
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	2	32.000	1:4				MPU.Z34.E11.BA0.MAIK4



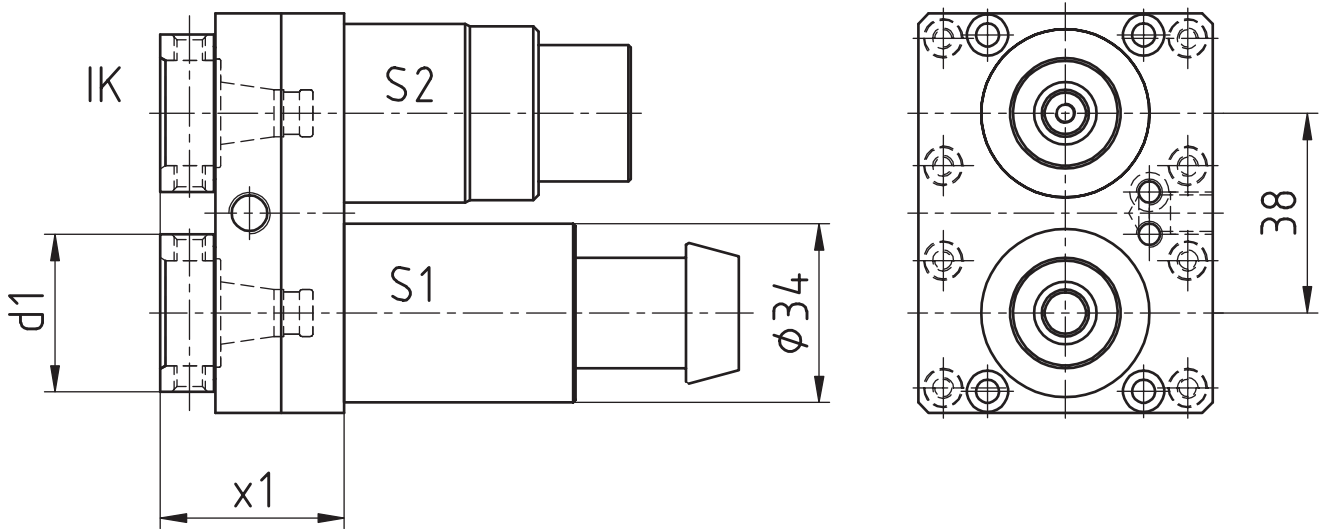
# Maier

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



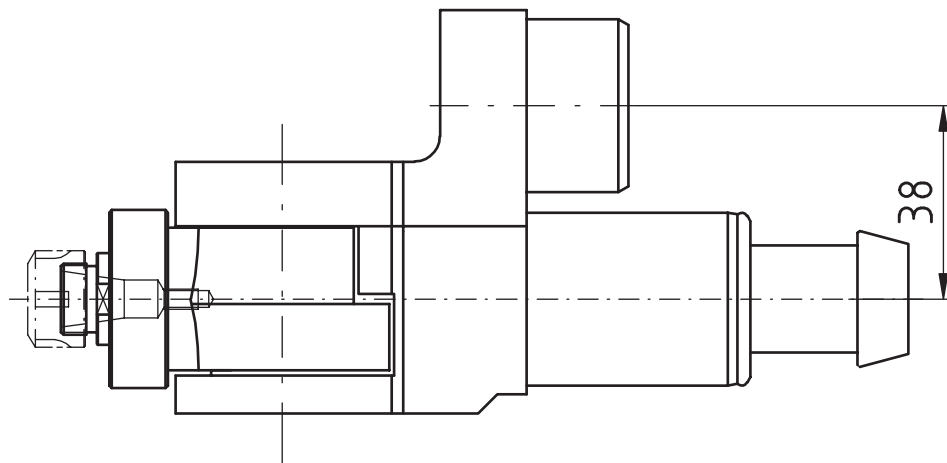
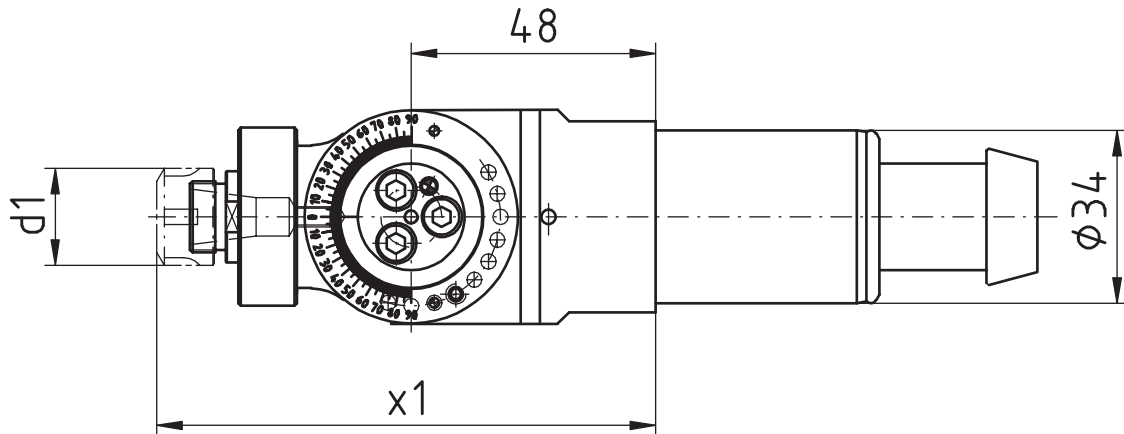
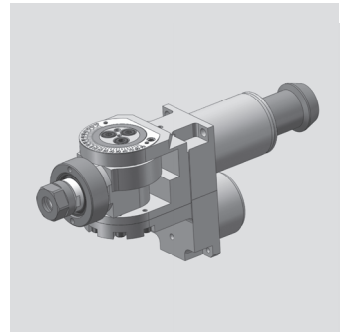
[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	10*	10.000*	1:1*	x	x	80	MPU.Z34.B20.ME0.MAIK

\* S1: 10 Nm/10.000 rpm/i=1:1  
S2: 7 Nm/15.000 rpm/i=1:1,5

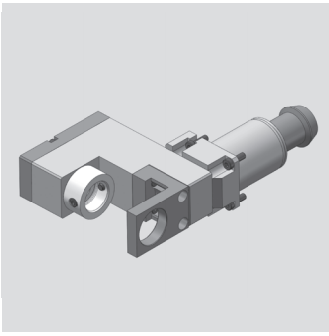
# Maier

**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>								
19	98	ER11	5	10.000	1:1				MPU.Z34.E11.SA0.MAIK



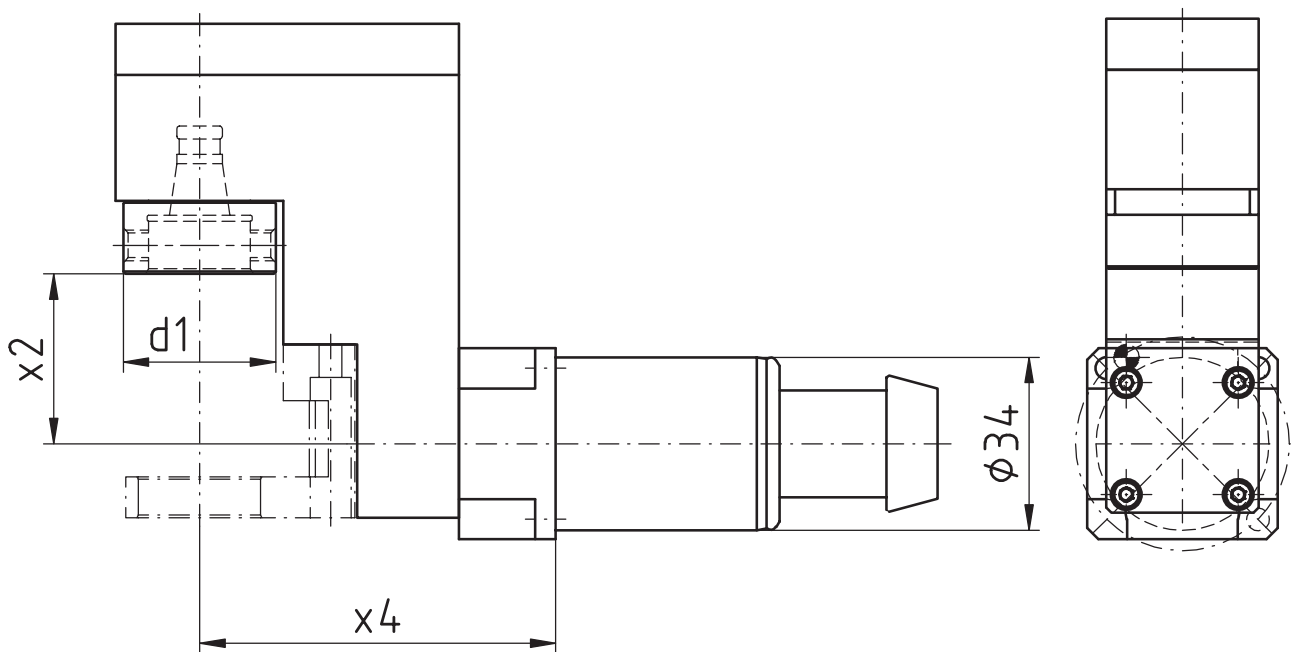
# Maier

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

**WG 35**



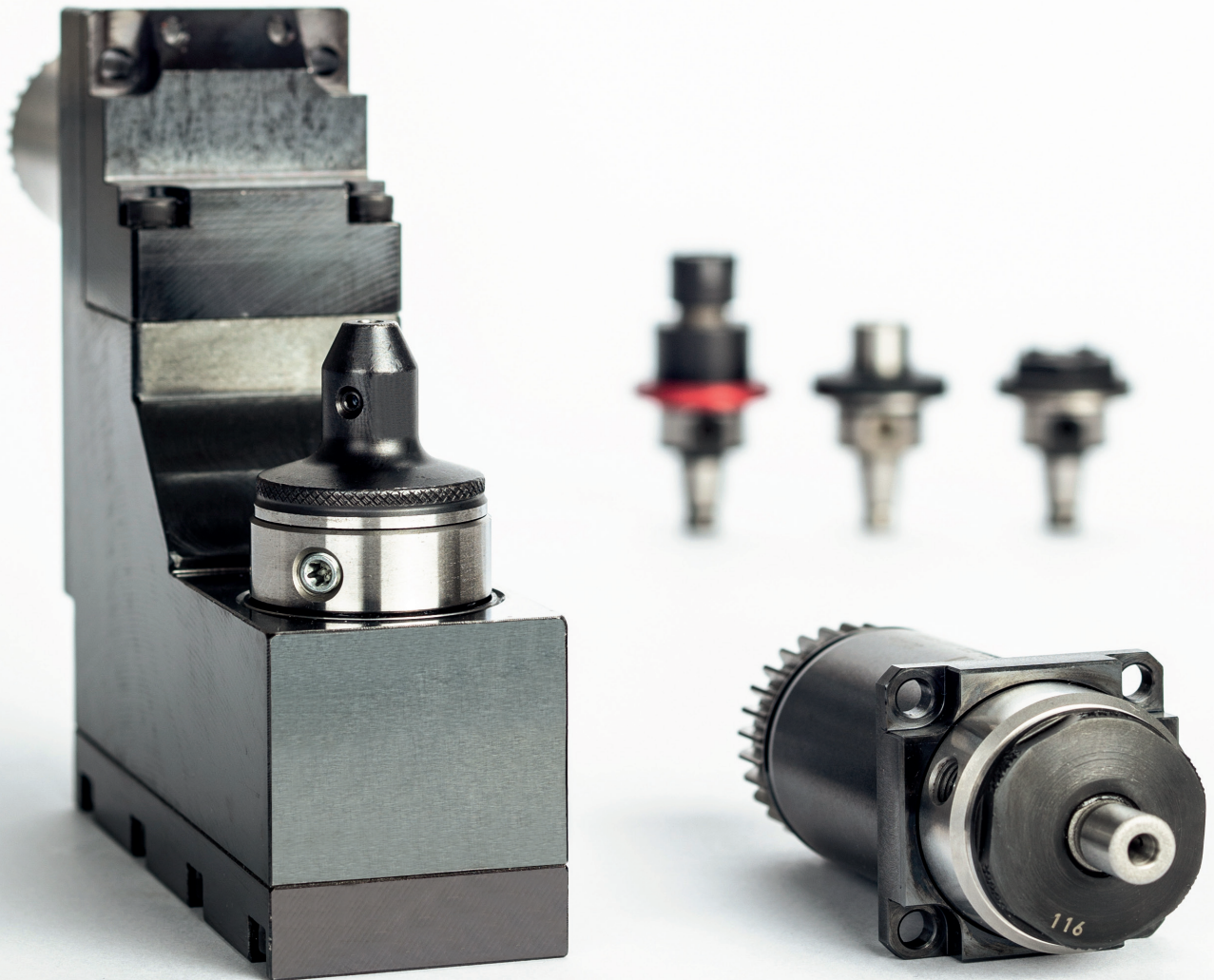
[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x2</b>	<b>x4</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	33,4	70	WFB 20-12	6	10.000	1:1			MPU.Z34.B20.VA0.MAIK

# Modulare Aggregatetechnik

## Star



Werkzeugtechnik



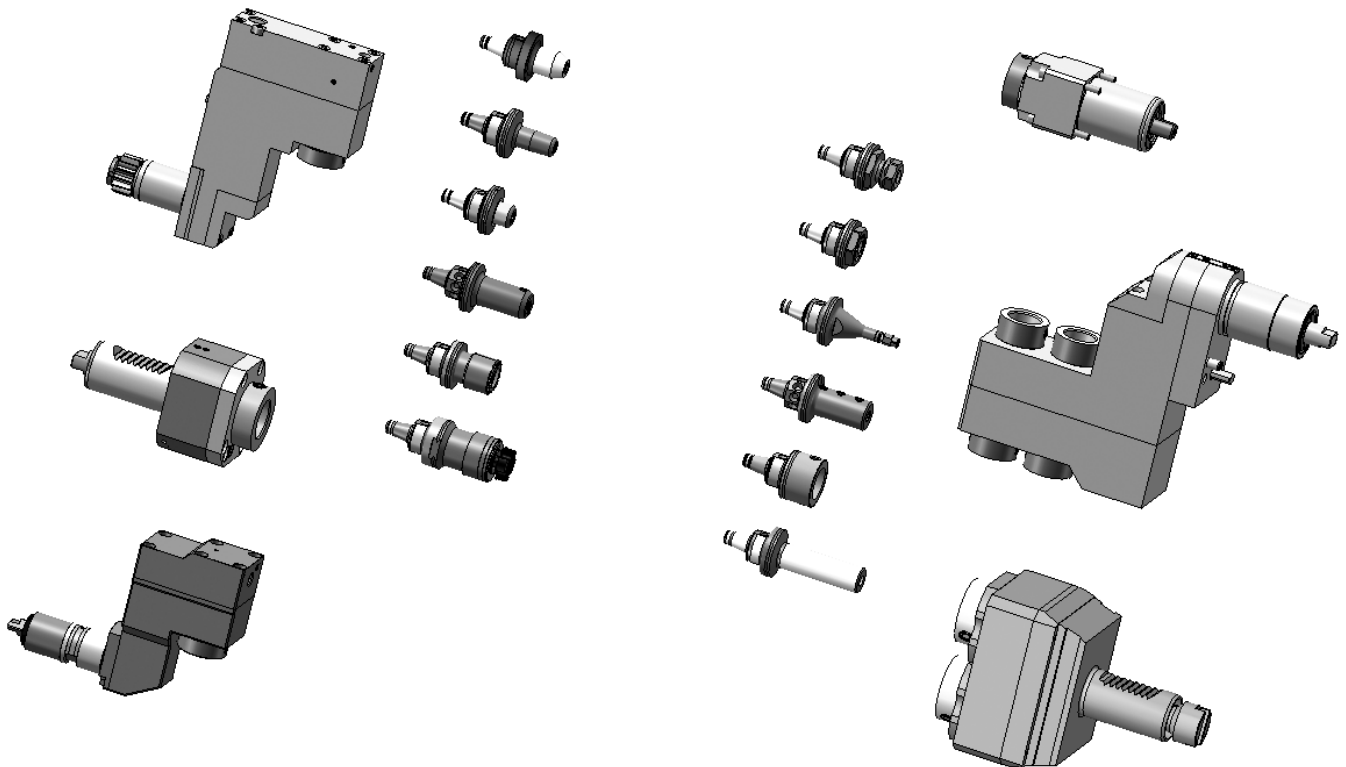
**Katalog  
ST-02**

# W&F

ph HORN ph

## WFB-Adapterpool

Indications for the customer



Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindel-drehen ein durchgängiges modulares Werkzeug-system einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.



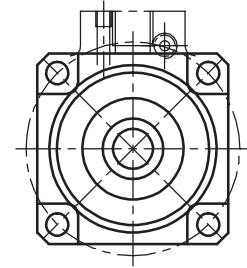
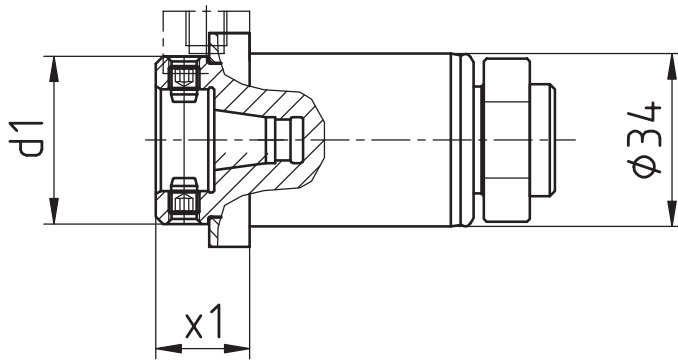
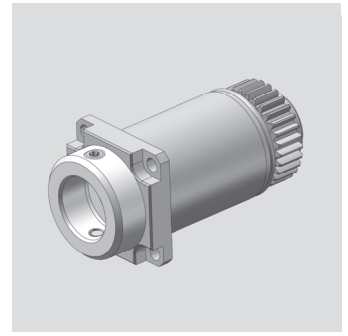
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

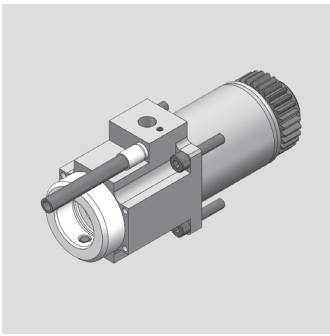
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1				i				
33	18,5	WFB 20-12	10	8.000	1:1				MPU.Z34.B20.AA0.SR20
33	18,5	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z34.B20.AE0.SR20

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/ JN	SR-20RIV
suitable machines:	ECAS-32T	SR-20RIII	SV-38R
approprié pour la machine:	SB-12/20R	SR-20RII	SW-20

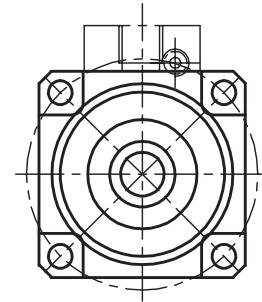
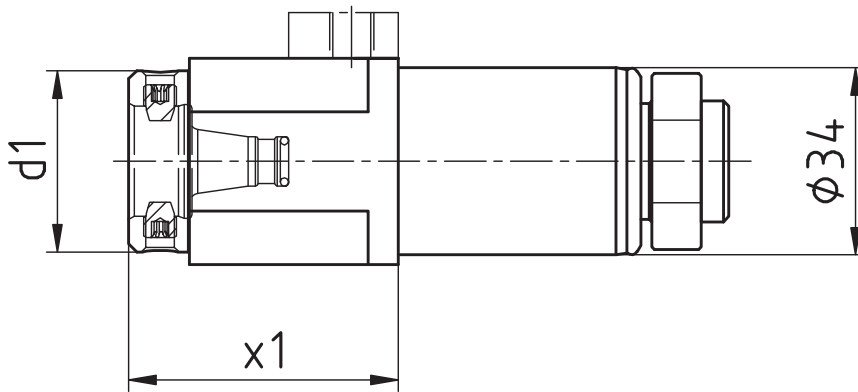
<b>Ähnlich OEM Nr.</b>	331-50-00
similar to OEM no.	
semblable au OEM nombre	



# Star

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>								
33	50	WFB 20-12	10	8.000	1:1				MPU.Z34.B20.AA0.SR20V
33	50	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z34.B20.AE0.SR20V

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/ JN	SR-20RIV
suitable machines:	ECAS-32T	SR-20RIII	SV-38R
approprié pour la machine:	SB-12/20R	SR-20RII	SW-20

<b>Ähnlich OEM Nr.</b>	331-50-00
similar to OEM no.	
semblable au OEM nombre	

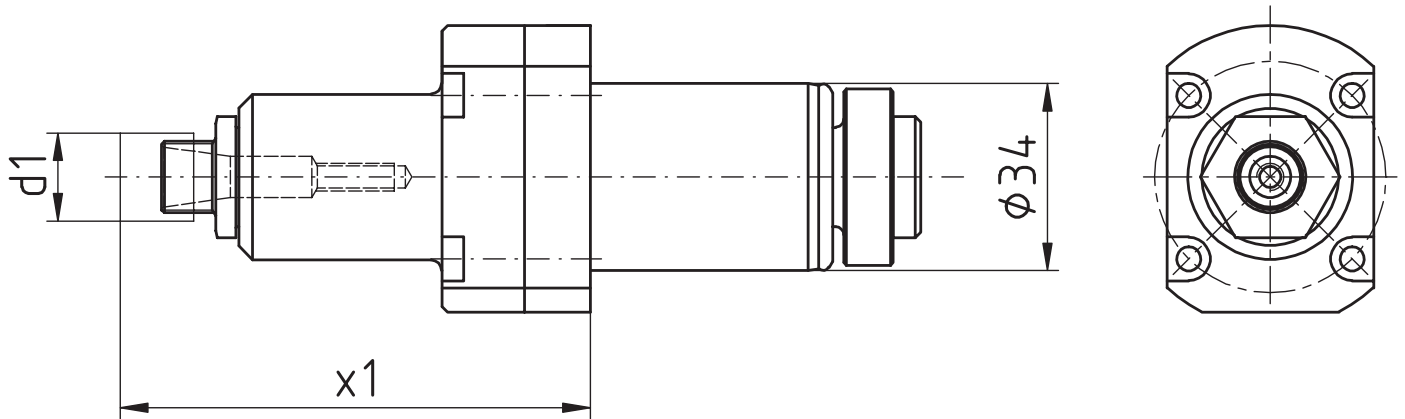
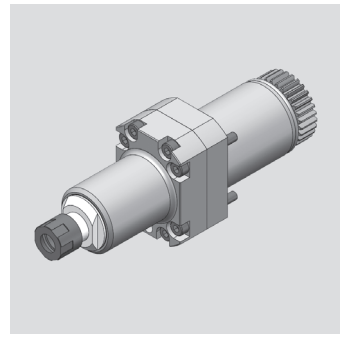
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

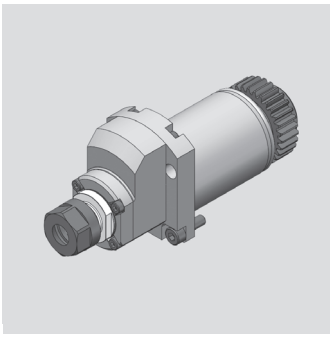
WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
16	85,4	ER11 MINI	3	19.200	1:2,4				MPU.Z34.E11.BA0.SR20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	ECAS-12/20	SR-20J/ JN	SR-20RIV
	SB-12/20R	SR-20RIII	SR-32J/ JN
	SR-10J	SR-20RII	SW-12RII

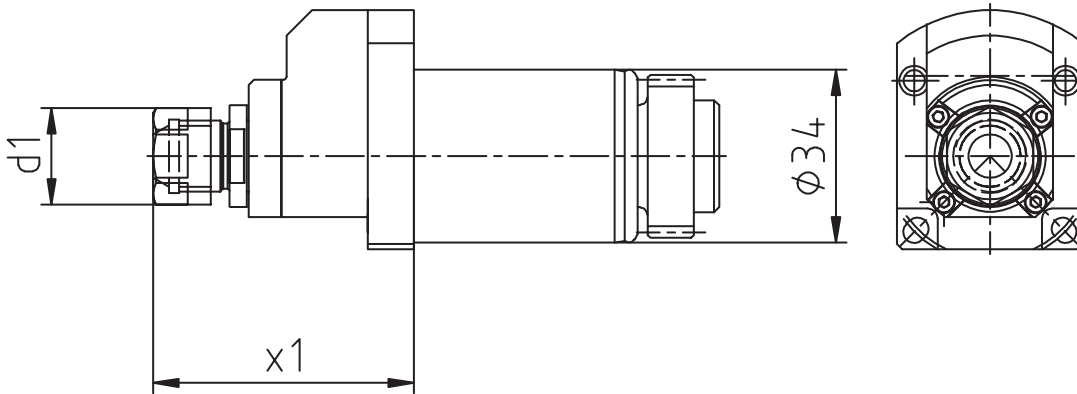
<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	331-50-00
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# Star

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1	ER11	2	32.000	1:4				MPU.Z34.E11.BA0.SR20.I4

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/ JN	SR-20RIV
suitable machines:	ECAS-32T	SR-20RIII	SV-38R
approprié pour la machine:	SB-12/20R	SR-20RII	SW-20

<b>Ähnlich OEM Nr.</b>	331-50-00
similar to OEM no.	
semblable au OEM nombre	

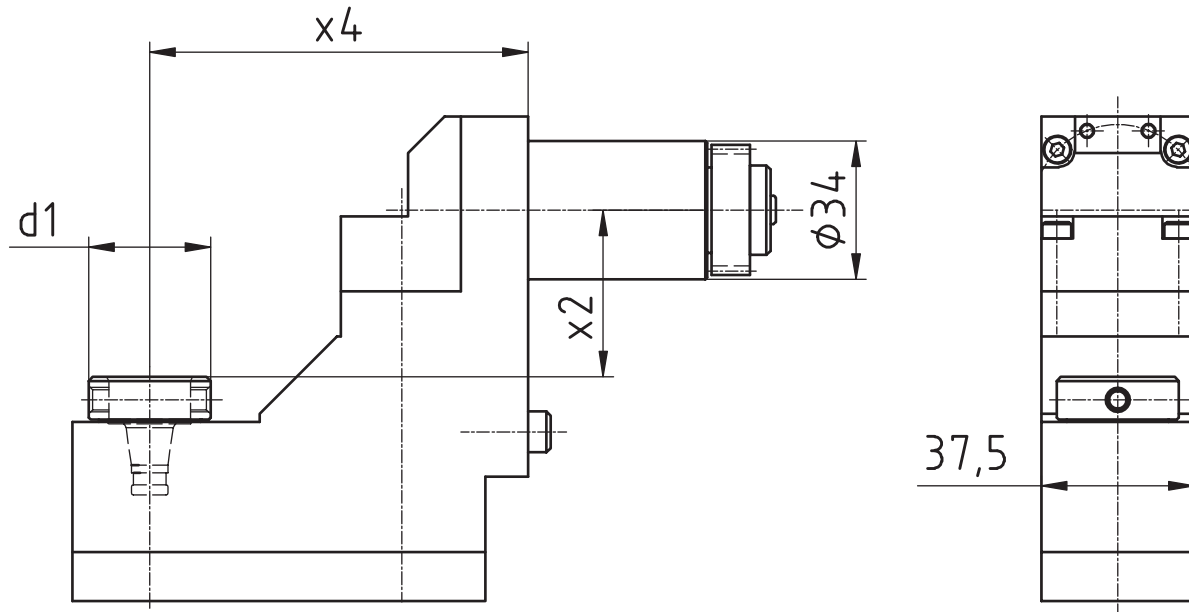
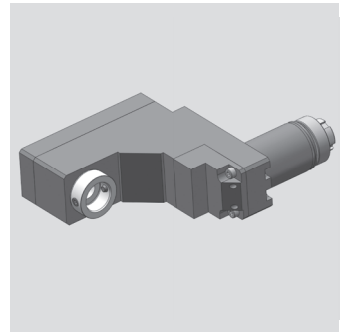
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

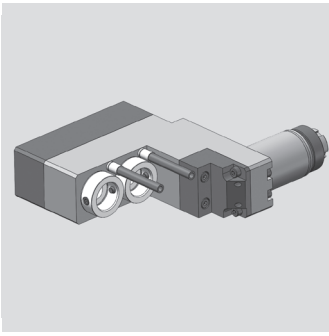
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
30	41	93	WFB 20-12	8	8.000	1:1				MPU.Z34.B20.581-52-00

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	ECAS-12/20	SR-20J/ JN	SR-20RIV
	SB-12/20R	SR-20RIII	SR-32J/ JN
	SR-10J	SR-20RII	SW-12RII

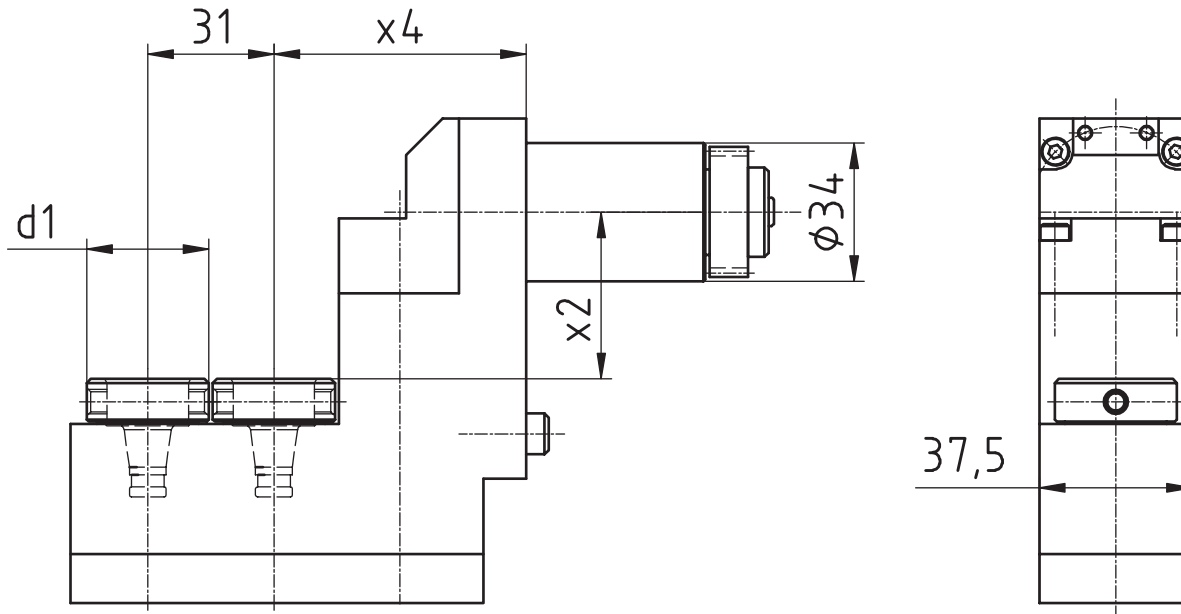
<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	581-52-00
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# Star

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	41	62	WFB 20-12	8	8.000	1:1				MPU.Z34.B20.541-51-00
30	41	62	WFB 20-12	8	8.000	1:1	x	x	80	MPU.Z34.B20.541-51-1K

<b>Passend für Maschine:</b>	SB-12/20R	SR-20RII
suitable machines:	SR-20J/ JN	SR-20RIV
approprié pour la machine:	SR-20RIII	

<b>Ähnlich OEM Nr.</b>	541-51-00
similar to OEM no.	
semblable au OEM nombre	

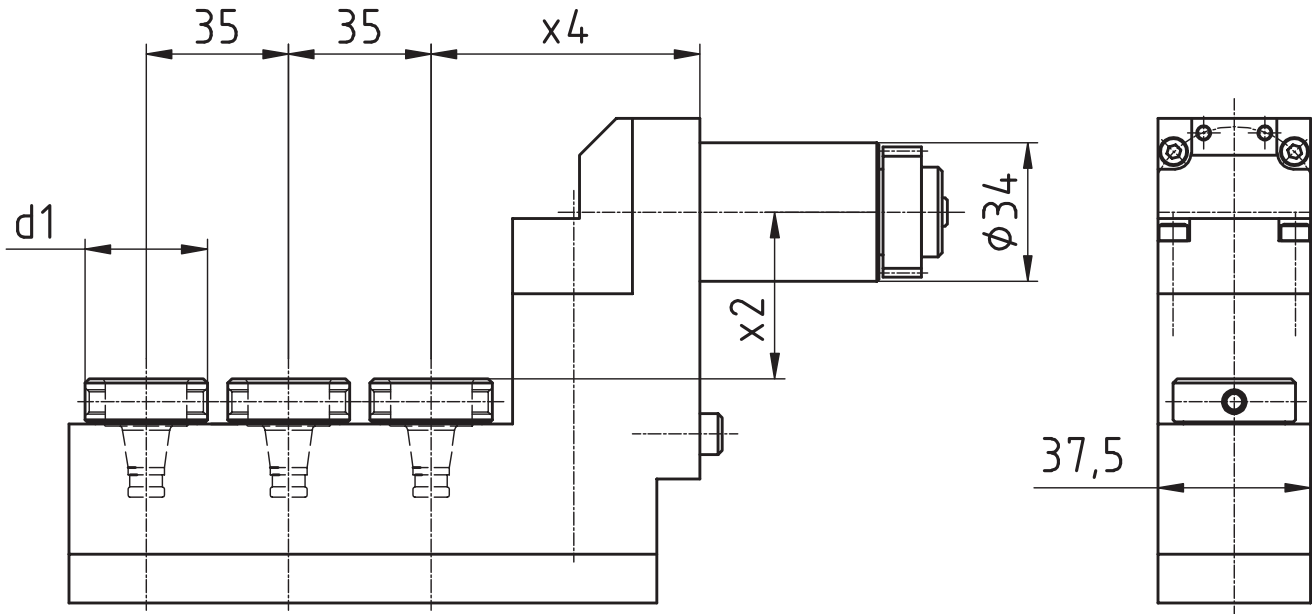
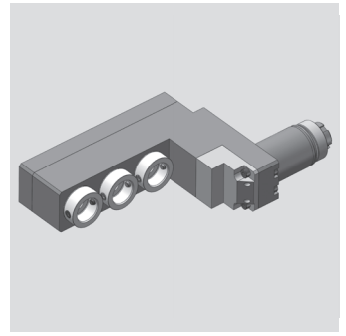
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

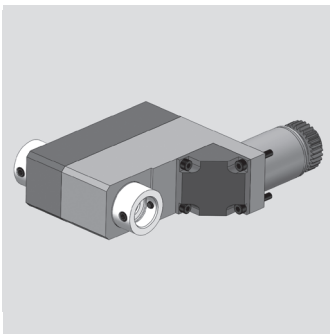
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4			i					
30	41	66	WFB 20-12	8	8.000	1:1				MPU.Z34.B20.661-51-00

<b>Passend für Maschine:</b>	SB-12/20R	SR-20RII
suitable machines:	SR-20J/ JN	SR-20RIV
approprié pour la machine:	SR-20RIII	

<b>Ähnlich OEM Nr.</b>	661-51-00
similar to OEM no.	
semblable au OEM nombre	



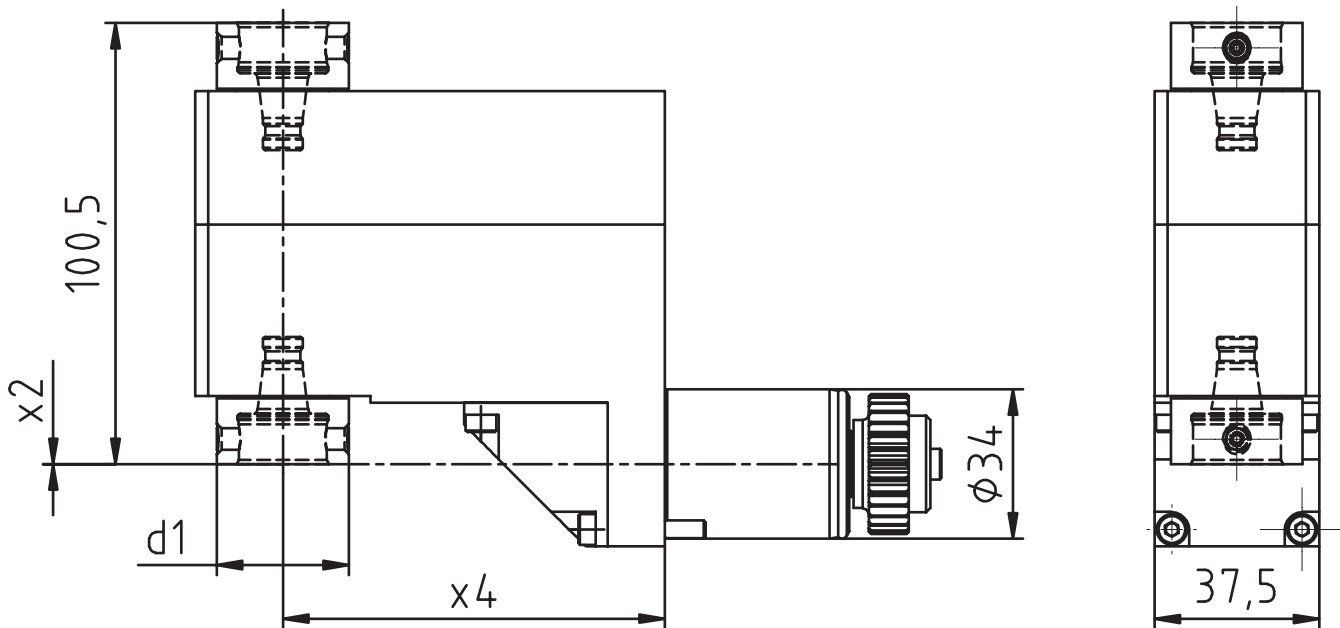
# Star

## Radial-Bohr- und Fräskopf (Mehrkantschlagen)

radial drilling and milling head (polyhedral beat)

Outil Rotatif Radial de Pertage et de Fraisage (battement polyedrique)

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	0	87	WFB 20-12	13	8.000	1:1				MPU.Z34.0900.SR20

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/ JN	SR-20RIV
suitable machines:	SB-12/20R	SR-20RIII	SR-32J/ JN
approprié pour la machine:	SR-10J	SR-20RII	SW-12RII

<b>Ähnlich OEM Nr.</b>	221-56-00
similar to OEM no.	
semblable au OEM nombre	



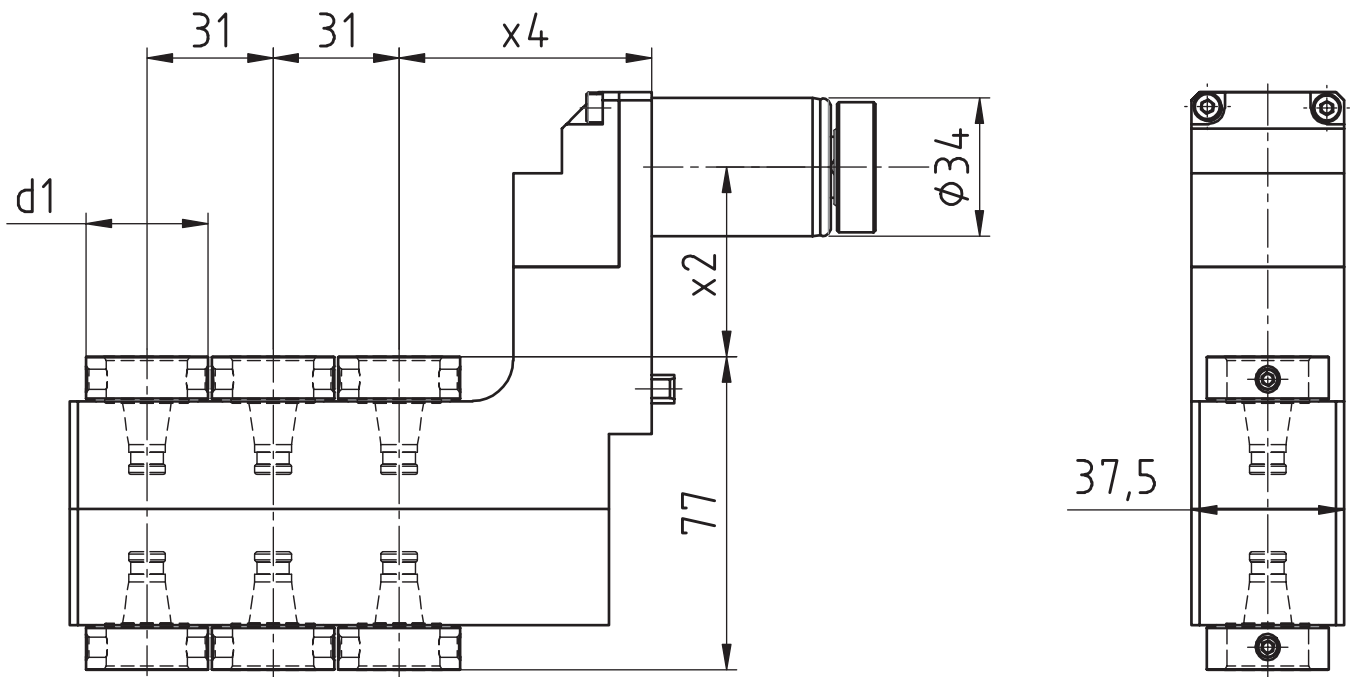
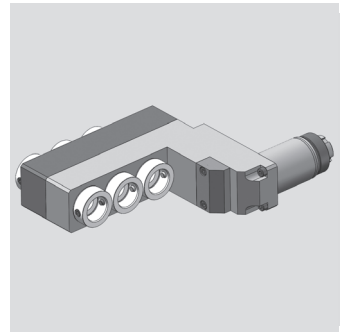
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

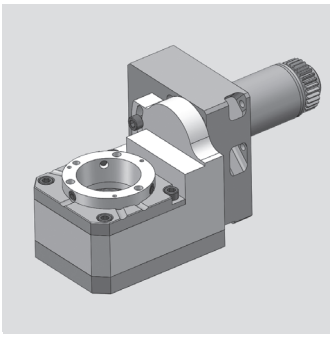
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4			i					
30	46,5	62	WFB 20-12	8	8.000	1:1				MPU.Z34.B20.6A0.0M1-55

<b>Passend für Maschine:</b>	SR-20J/ JN	SR-20RIV
suitable machines:	SR-20RIII	
approprié pour la machine:	SR-20RII	

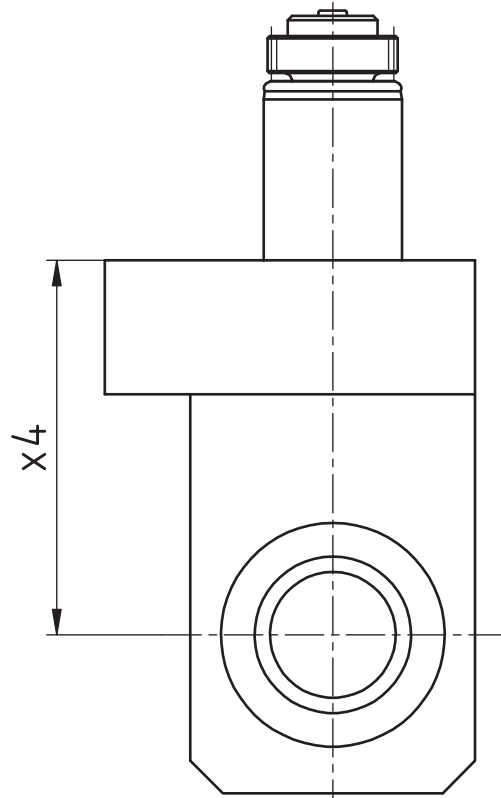
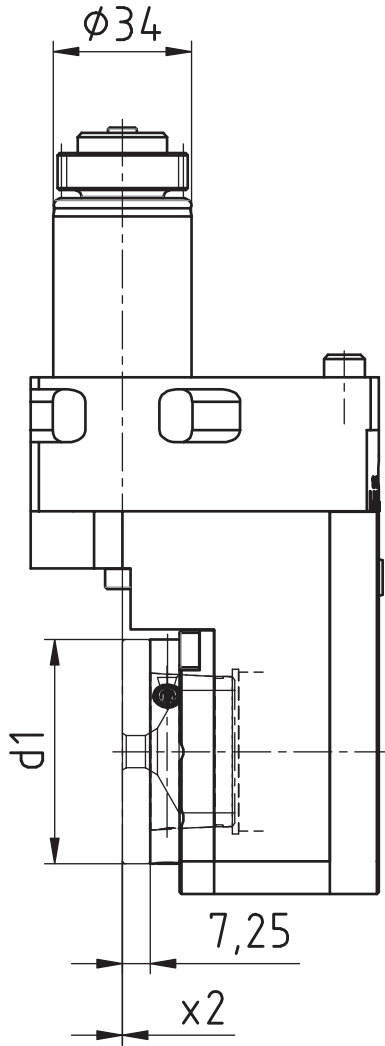
<b>Ähnlich OEM Nr.</b>	OM1-55
similar to OEM no.	
semblable au OEM nombre	



# Star

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
54	0	92	WFW 50	16	4.000	2:1	x			MPU.Z34.M0800.SR20

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/JN	R-20RIV
suitable machines:	SB-12/20R	SR-20RIII	R-32J/JN
approprié pour la machine:	SR-10J	SR-20RII	SW-12RII

<b>Ähnlich OEM Nr.</b>	541-78-00
similar to OEM no.	
semblable au OEM nombre	

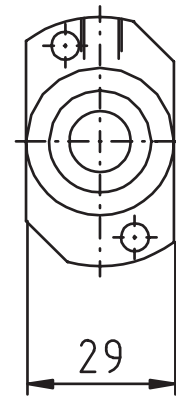
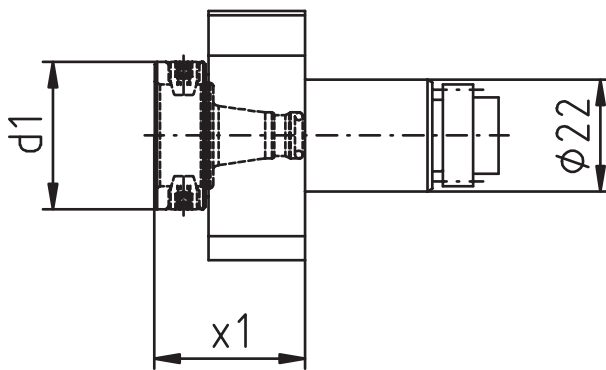
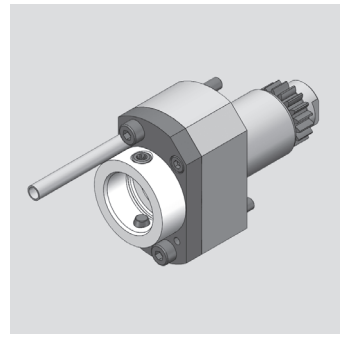
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

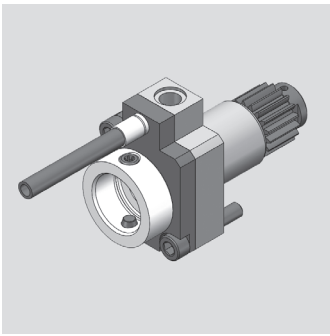
WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
29	29,5	WFB 20-12	10	8.000	1:1				MPU.Z22.B20.541-61-00
29	29,5	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z22.B20.541-61-1K

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/ JN	SR-20RIV
suitable machines:	SB-12/20R	SR-20RIII	SR-32J/ JN
approprié pour la machine:	SR-10J	SR-20RII	SW-12RII

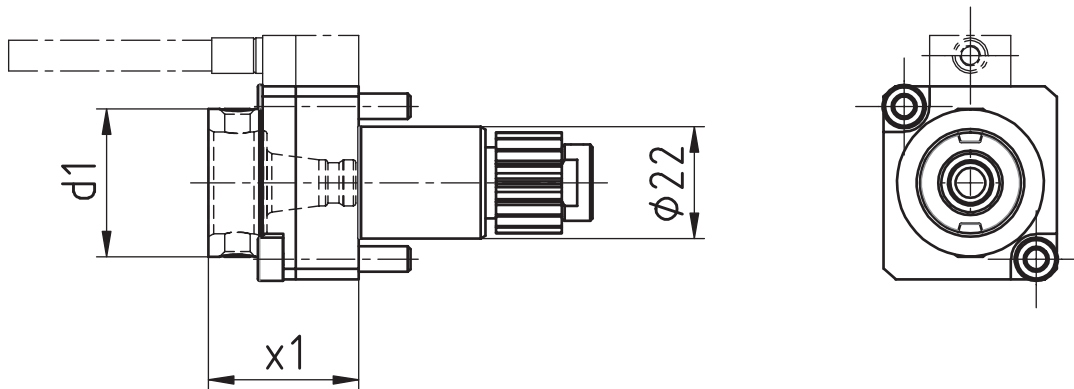
<b>Ähnlich OEM Nr.</b>	541-61-00
similar to OEM no.	
semblable au OEM nombre	



# Star

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
30	29,5	WFB 20-12	10	8.000	1:1				MPU.Z22.B20.AA0.OR-61
30	29,5	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z22.B20.AE0.OR-61

<b>Passend für Maschine:</b>	SB-12/20R	SR-38(Type A/B)
suitable machines:	SR-20RIV	SV-12RII
approprié pour la machine:	SR-32J/ JN	SW20

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	OR-61
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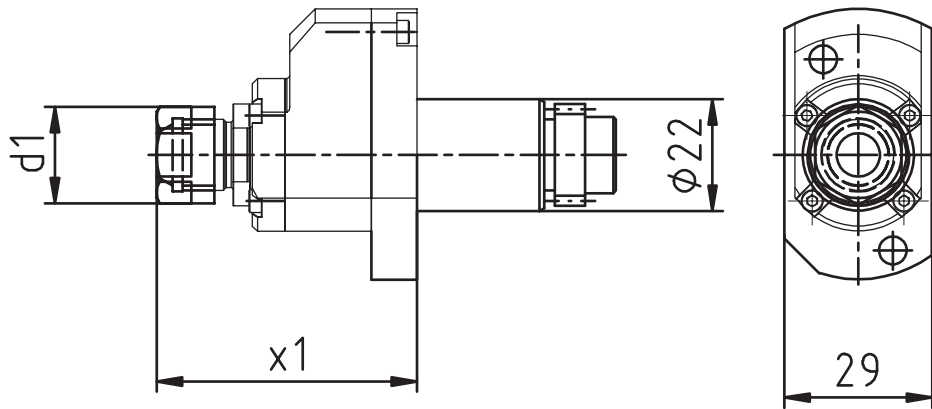
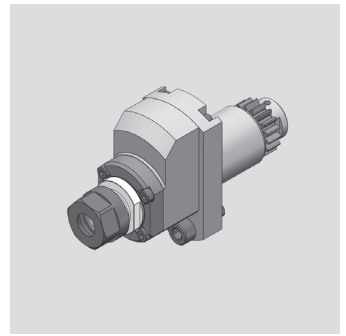
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

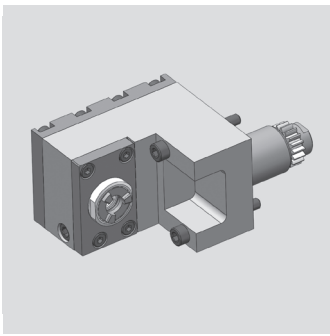
WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
19	51,2	ER11	2	32.000	1:4				MPU.Z22.E11.BA0.SR20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	ECAS-12/20	SR-20J/JN	SR-20RIV
	SB-12/20R	SR-20RIII	SR-32J/JN
	SR-10J	SR-20RII	SW-12RII

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	541-61-00
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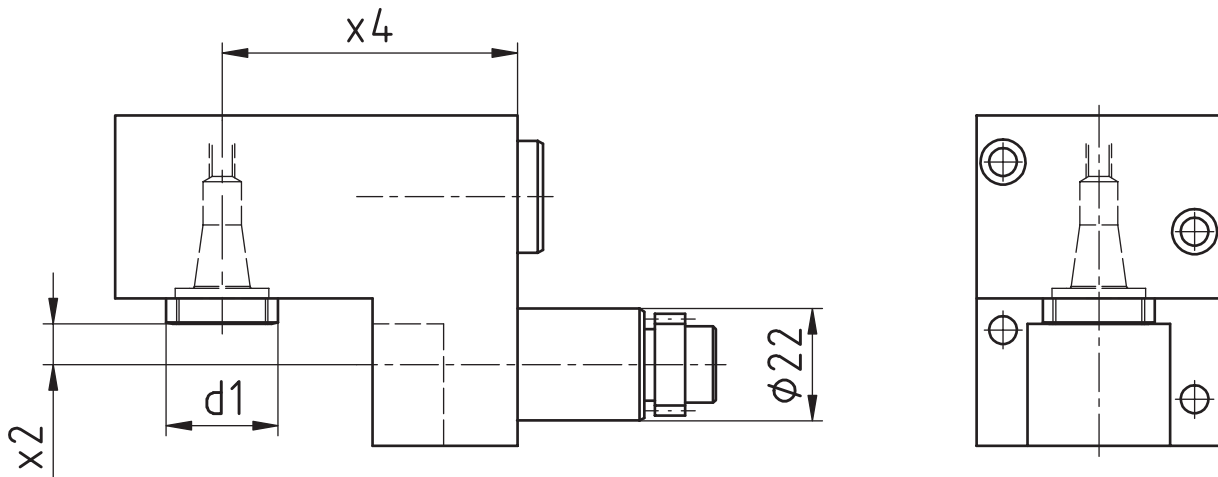
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	ER11	10	8.000	1:1			MPU.Z22.E11.VA0.SR20

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/JN	SR-20TIV
suitable machines:	SB-12/20R	SR20-RIII	SR-32J/JN
approprié pour la machine:	SR-10J	SR20-RII	SW-12RII

<b>Ähnlich OEM Nr.</b>	
similar to OEM no.	
semblable au OEM nombre	

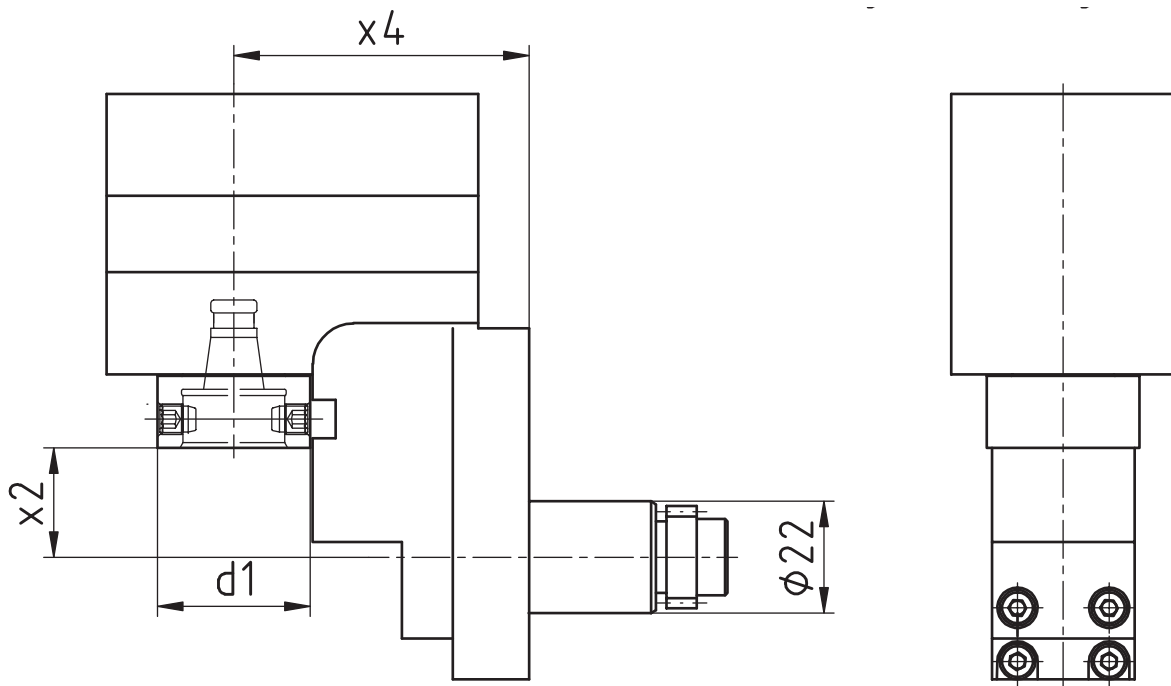
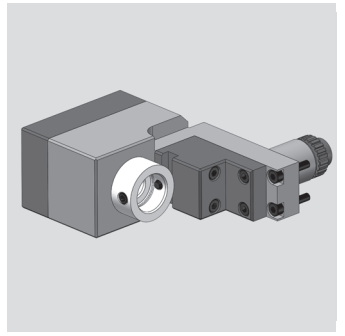
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

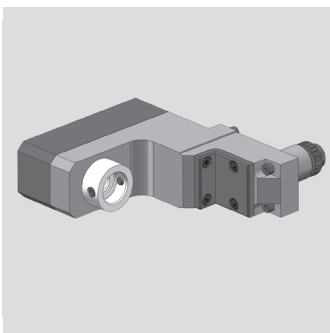
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4			i					
30	21,5	84,5	WFB 20-12	13	4.000	2:1				MPU.Z22.B20.WA0.SR20

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	ECAS-12/20	SR-20J/JN	SR-20TIV
	SB-12/20R	SR20-RIII	SR-32J/JN
	SR-10J	SR20-RII	SW-12RII

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	
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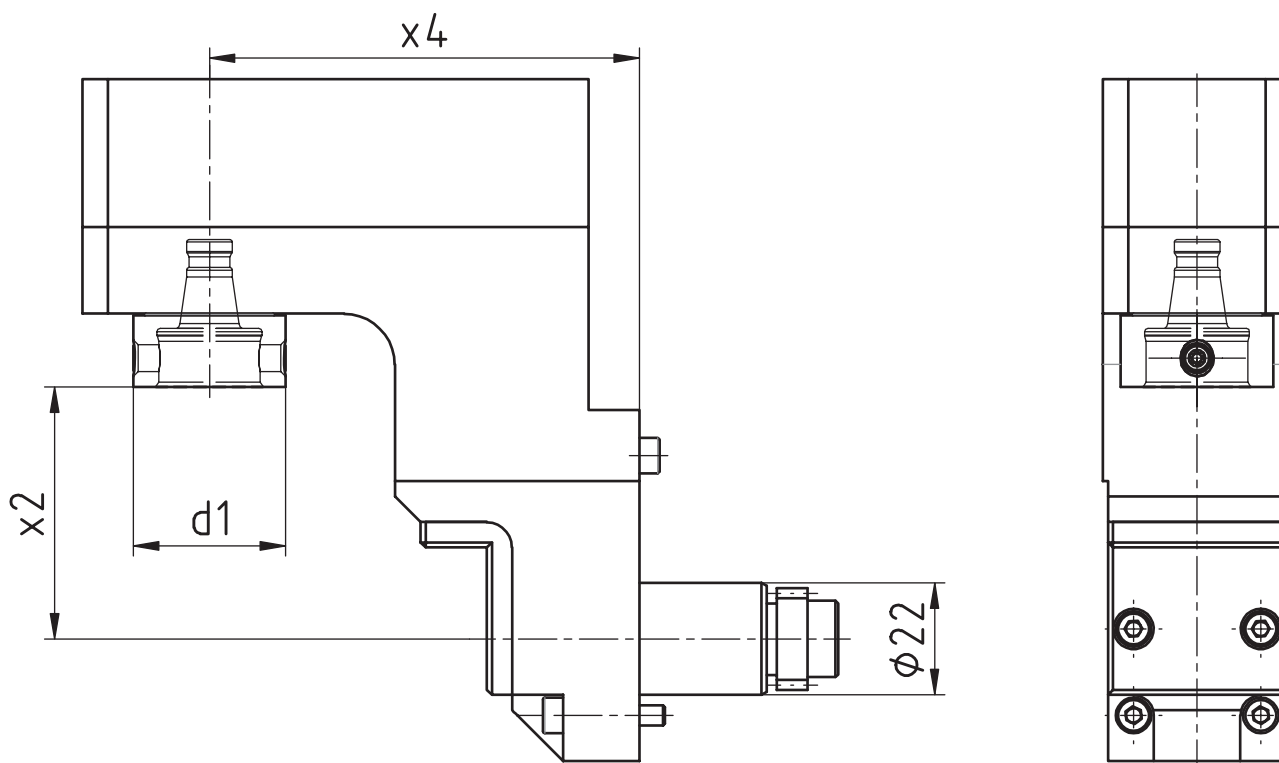
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer
30	49,5	84,5	WFB 20-12	10	8.000	1:1			MPU.Z22.B20.RA0.OR1-51

<b>Passend für Maschine:</b>	ECAS-12/20	SR-20J/JN	SR-20TIV
suitable machines:	SB-12/20R	SR20-RIII	SR-32J/JN
approprié pour la machine:	SR-10J	SR20-RII	SW-12RII

<b>Ähnlich OEM Nr.</b>	OR1-51
similar to OEM no.	
semblable au OEM nombre	



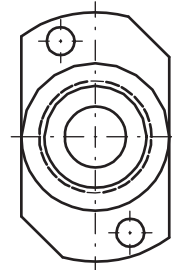
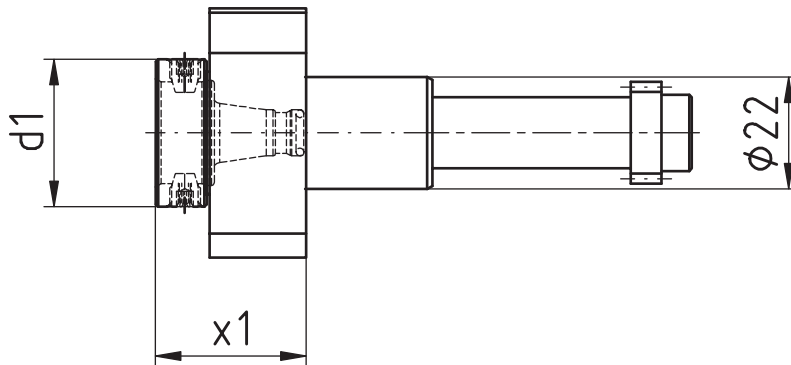
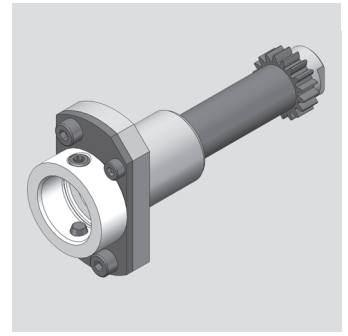
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

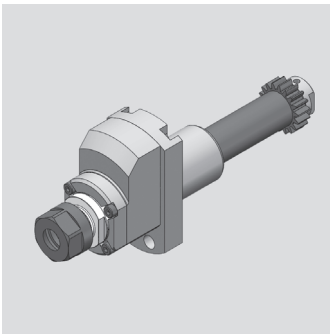
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
29	29,5	WFB 20-12	10	12.000	1:1				MPU.Z22.B20.101-52-00

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	SW-12R11
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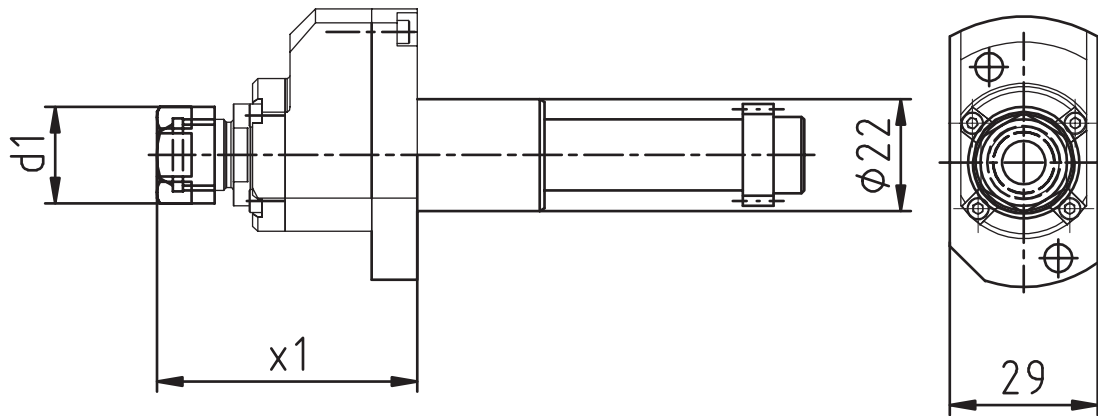
<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	101-52-00
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# Star

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	2	32.000	1:4				MPU.Z22.E11.BA0.101-52

**Passend für Maschine:** SW-12R11  
 suitable machines:  
 approprié pour la machine:

**Ähnlich OEM Nr.** 101-52-00  
 similar to OEM no.  
 semblable au OEM nombre

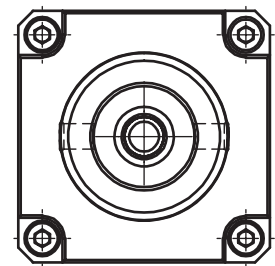
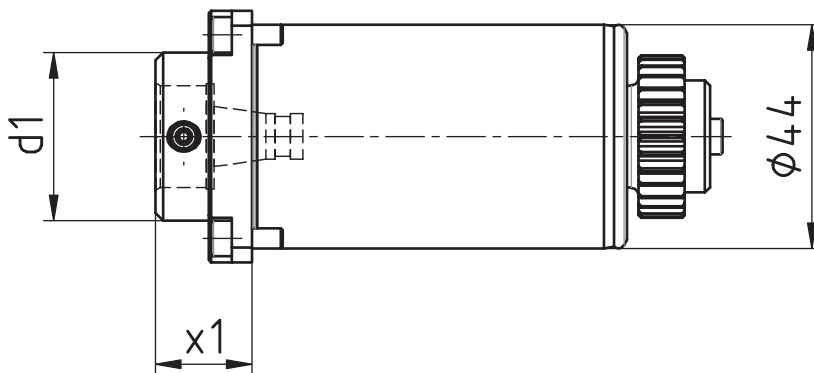
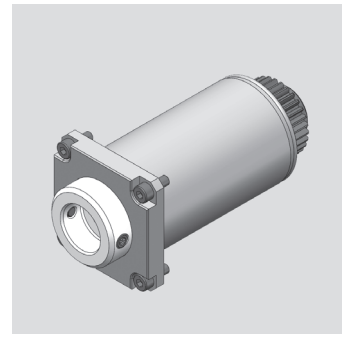
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

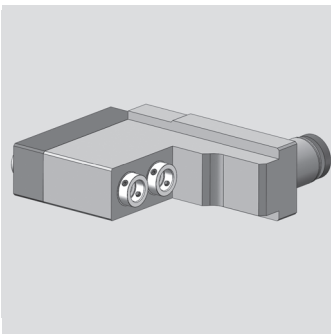
WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
30	19	WFB 20-12	16	6.000	1:1				MPU.Z44.B20.101-68-00

**Passend für Maschine:** SR-38(Type A/B)  
 suitable machines:  
 approprié pour la machine:

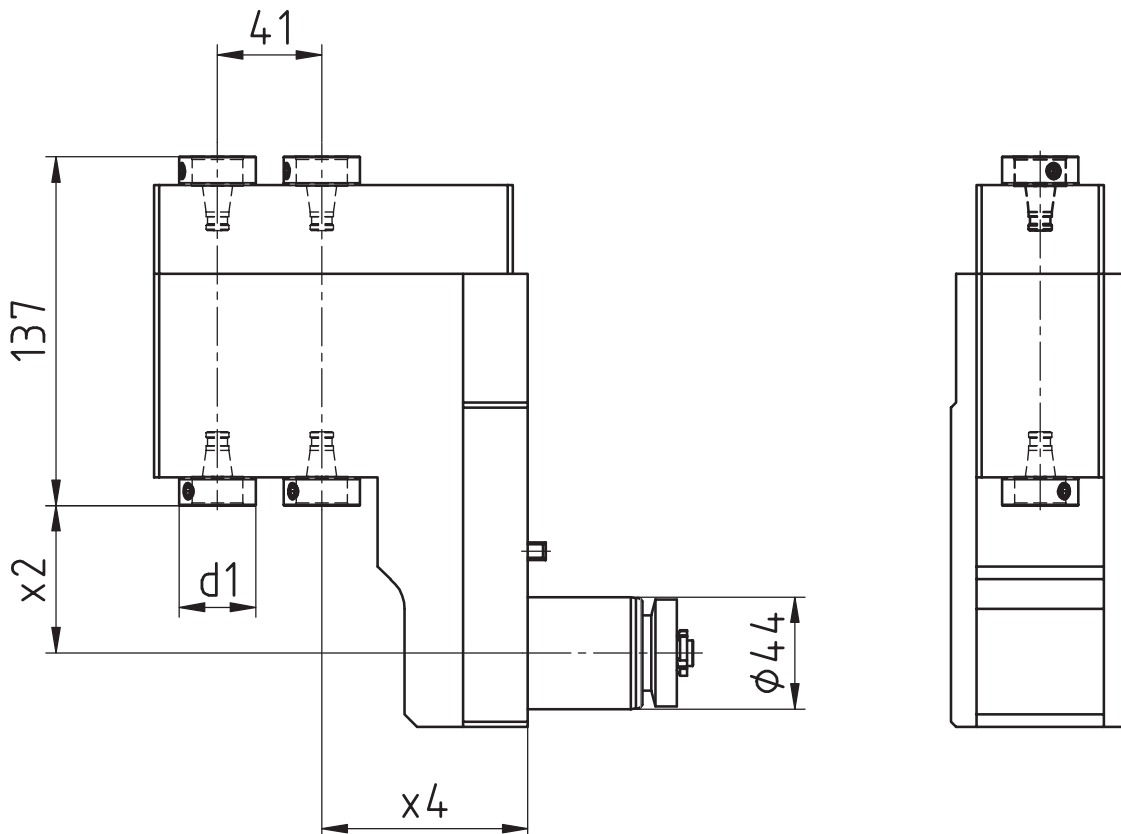
**Ähnlich OEM Nr.** 101-68-00  
 similar to OEM no.  
 semblable au OEM nombre



# Star

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]		Spindle	[Nm]	[rpm]	Outside cooling	Internal cooling	[bar]	Order no.
d1	x1		Broche	T max	n max	i	Lubrificat. ext.	Lubrificat. cent.	N° de Code
			Spindel				Aussenkühlung	Innenkühlung	Bestellnummer
30	53,5	81	WFB 20-12	16	6.000	1:1			MPU.Z44.B20.101-69-00

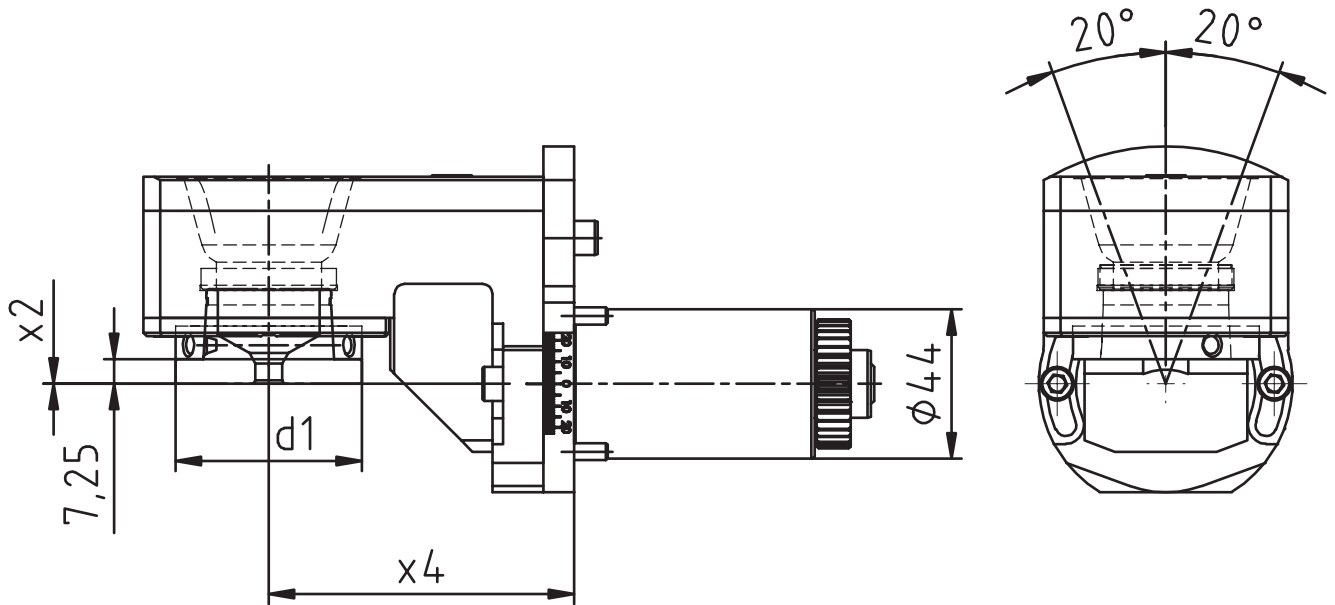
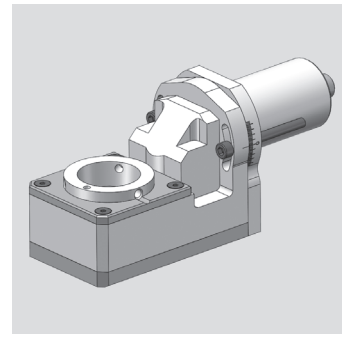
**Passend für Maschine:** SR-38(Type A/B)  
 suitable machines:  
 approprié pour la machine:

**Ähnlich OEM Nr.** 101-69-00  
 similar to OEM no.  
 semblable au OEM nombre

# Star

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

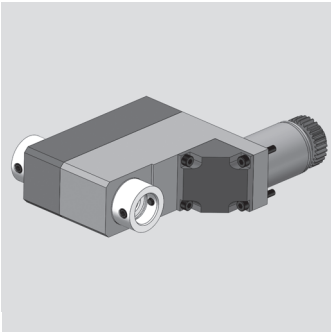
**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
54	0	90	WFW 50	16	6.000	1:1	x			MPU.Z44.M0800.SR38

**Passend für Maschine:** SR-38(Type A/B)  
 suitable machines:  
 approprié pour la machine:

**Ähnlich OEM Nr.** 101-72-00  
 similar to OEM no.  
 semblable au OEM nombre



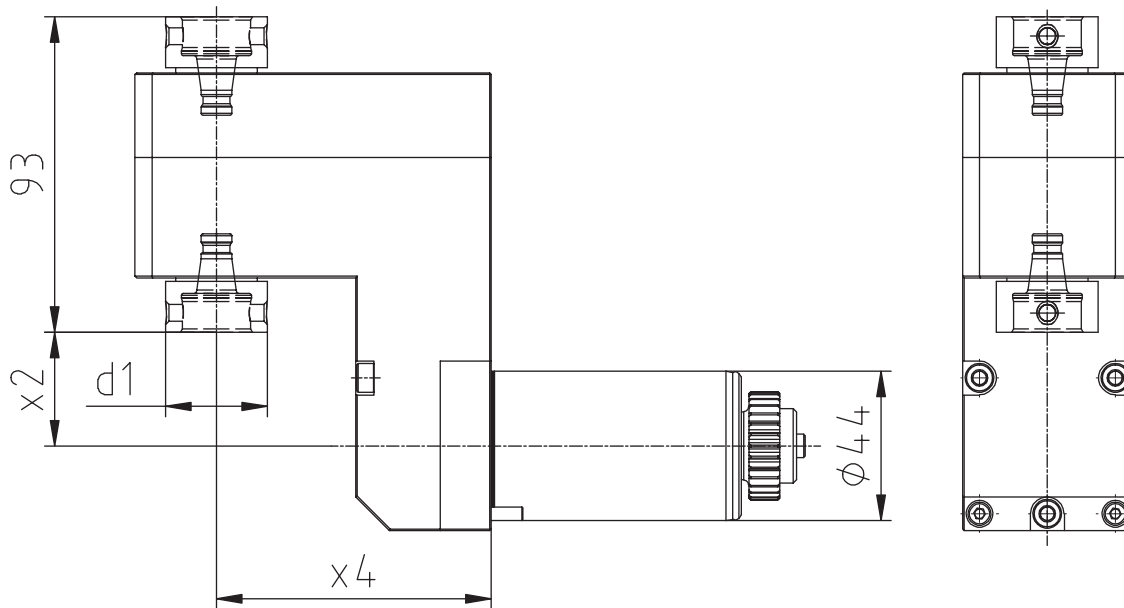
# Star

## Radial-Bohr- und Fräskopf (Mehrkantschlagen)

radial drilling and milling head (polyhedral beat)

Outil Rotatif Radial de Pertage et de Fraisage (battement polyedrique)

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer
30	33,5	81	WFB 20-12	16	6.000	1:1			MPU.Z44.0900.SR38

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	SR-38
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<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	101-71-00
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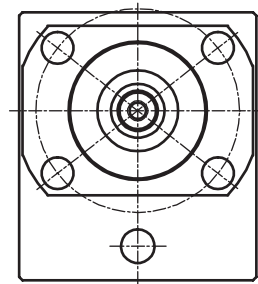
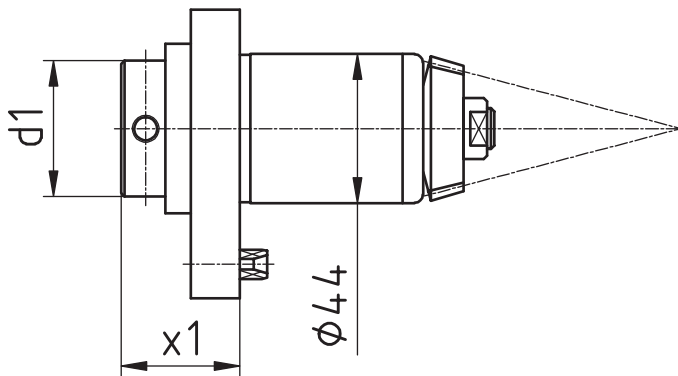
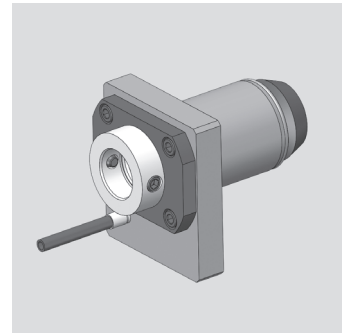
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

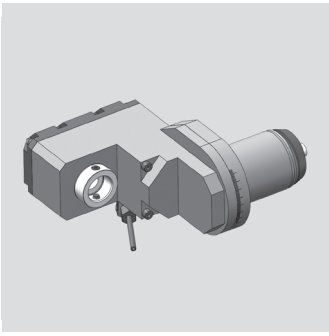
WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1			i					
40	35	WFB 24-16	32	8.000	1:1				MPU.Z44.B24.201-50-00
40	35	WFB 24-16	32	8.000	1:1	x	x	80	MPU.Z44.B24.201-50-1K

Passend für Maschine: ECAS-32T  
 suitable machines: ST-38  
 approprié pour la machine: SV-38R

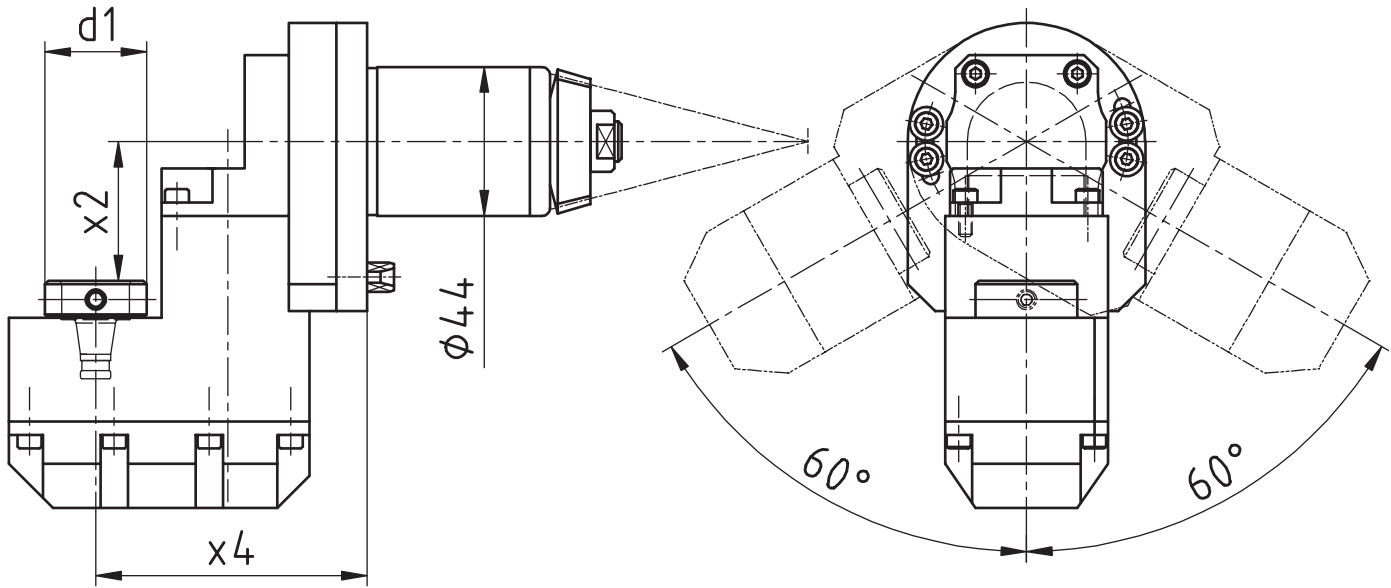
Ähnlich OEM Nr. 201-50-00  
 similar to OEM no.  
 semblable au OEM nombre



# Star

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4								
30	41	80	WFB 20-12	10	8.000	1:1				MPU.Z44.B20.431-55-00
30	41	80	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z44.B20.431-55-1K

<b>Passend für Maschine:</b>	ECAS-32T
suitable machines:	ST-38
approprié pour la machine:	SV-38R

<b>Ähnlich OEM Nr.</b>	431-55-00
similar to OEM no.	
semblable au OEM nombre	



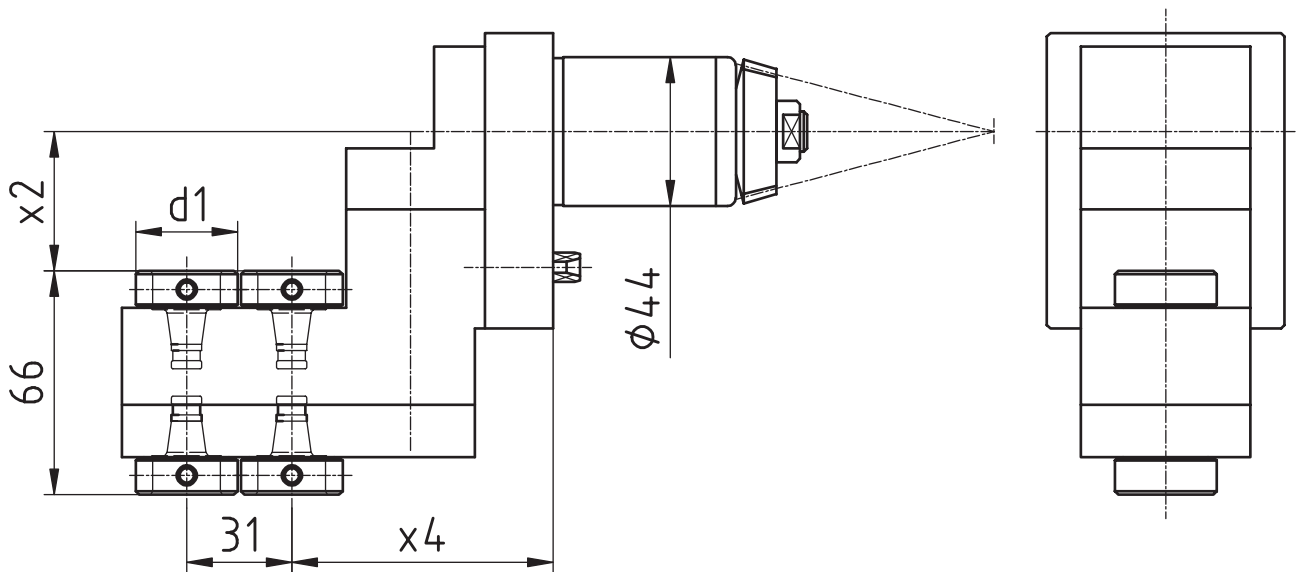
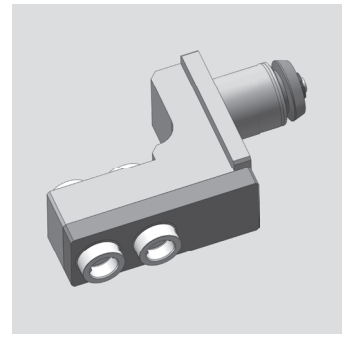
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

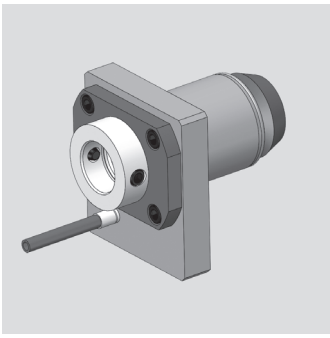
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4			i					
30	41	77	WFB 20-12	10	8.000	1:1				MPU.Z44.B20.431-59-00

<b>Passend für Maschine:</b>	ECAS-32T
suitable machines:	ST-38
approprié pour la machine:	SV-38R

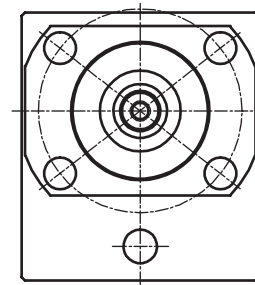
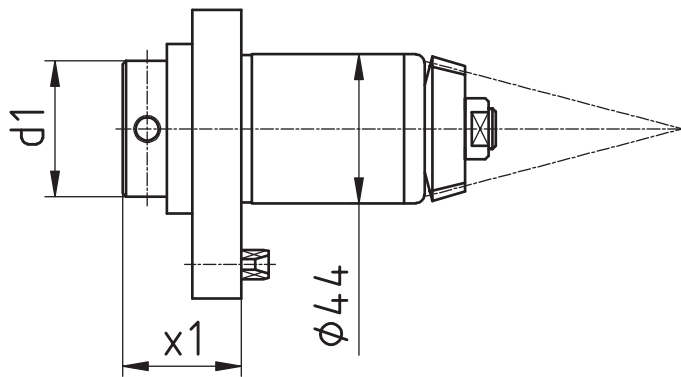
<b>Ähnlich OEM Nr.</b>	431-59-00
similar to OEM no.	
semblable au OEM nombre	



# Star

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1				i				
40	35	WFB 24-16	32	8.000	1:1				MPU.Z44.B24.221-50-00
40	35	WFB 24-16	32	8.000	1:1	x	x	80	MPU.Z44.B24.221-50-1K

<b>Passend für Maschine:</b>	ST20	SV-20
suitable machines:	ECAS-20T	SV-20R
approprié pour la machine:	SV-12	SV-32JII

<b>Ähnlich OEM Nr.</b>	221-50-00
similar to OEM no.	
semblable au OEM nombre	

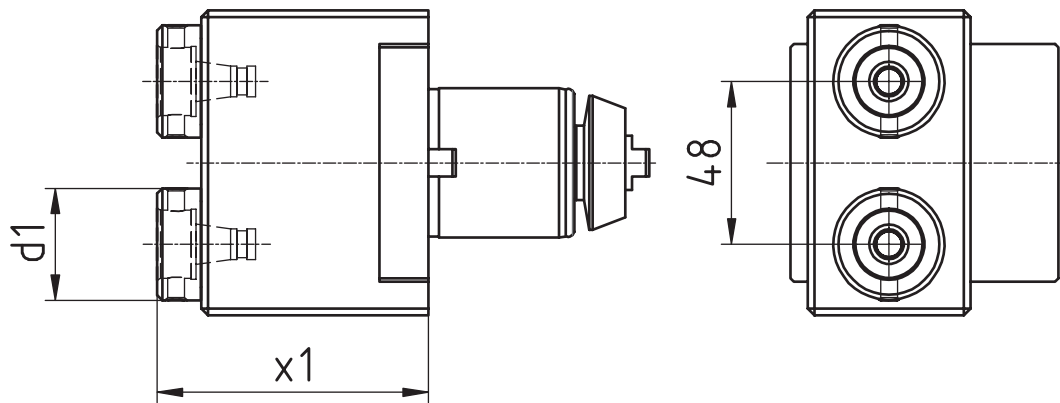
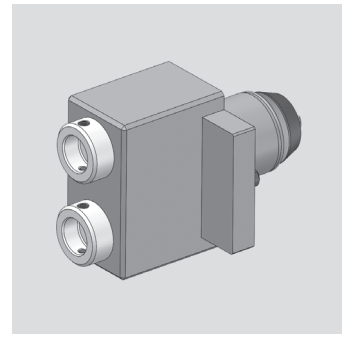
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

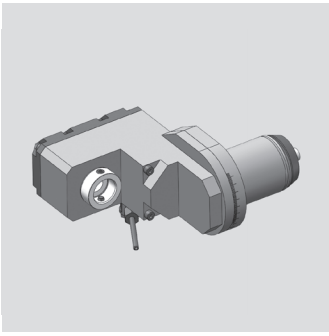
WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>								
33	73,25	WFB 20-12	16	8.000	1:1				MPU.Z44.B20.421-52-00
33	73,25	WFB 20-12	16	8.000	1:1	x	x	80	MPU.Z44.B20.421-52-1K

<b>Passend für Maschine:</b>	ST20	SV-20
suitable machines:	ECAS-20T	SV-20R
approprié pour la machine:	SV-12	SV-32JII

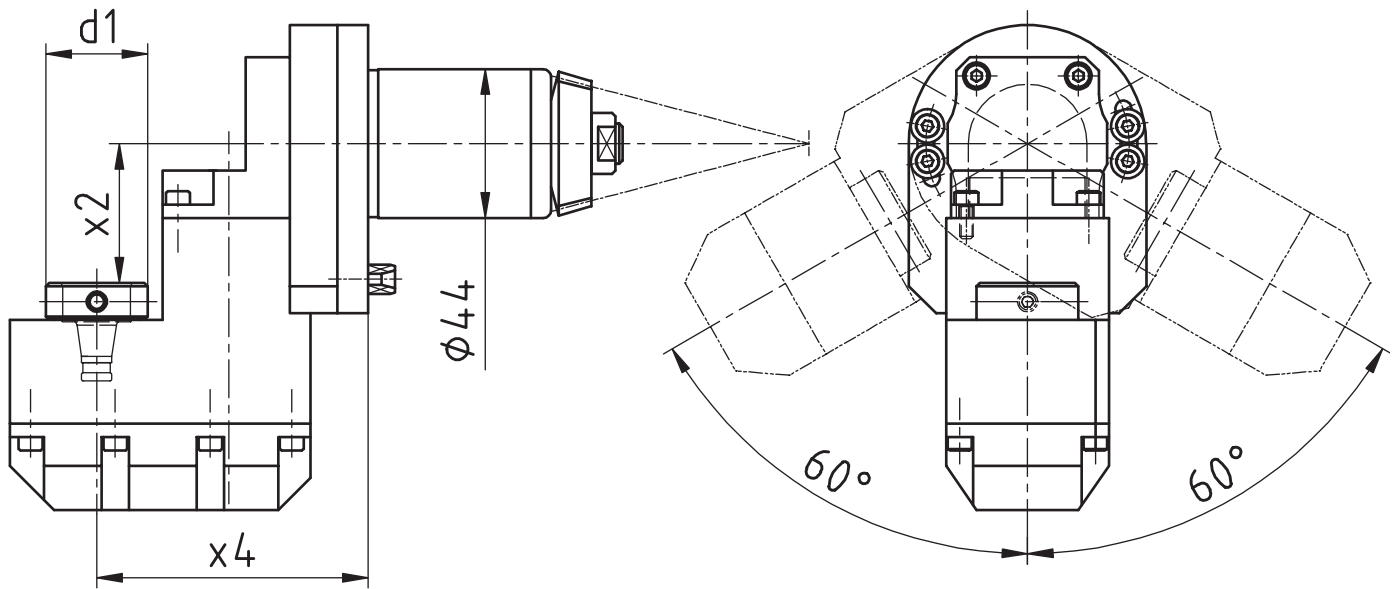
<b>Ähnlich OEM Nr.</b>	421-52-00
similar to OEM no.	
semblable au OEM nombre	



# Star

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
30	41	80	WFB 20-12	10	8.000	1:1				MPU.Z44.B20.421-55-00
30	41	80	WFB 20-12	10	8.000	1:1	x	x	80	MPU.Z44.B20.421-55-1K

<b>Passend für Maschine:</b>	ST20	SV-20
suitable machines:	ECAS-20T	SV-20R
approprié pour la machine:	SV-12	SV-32JII

<b>Ähnlich OEM Nr.</b>	421-55-00
similar to OEM no.	
semblable au OEM nombre	

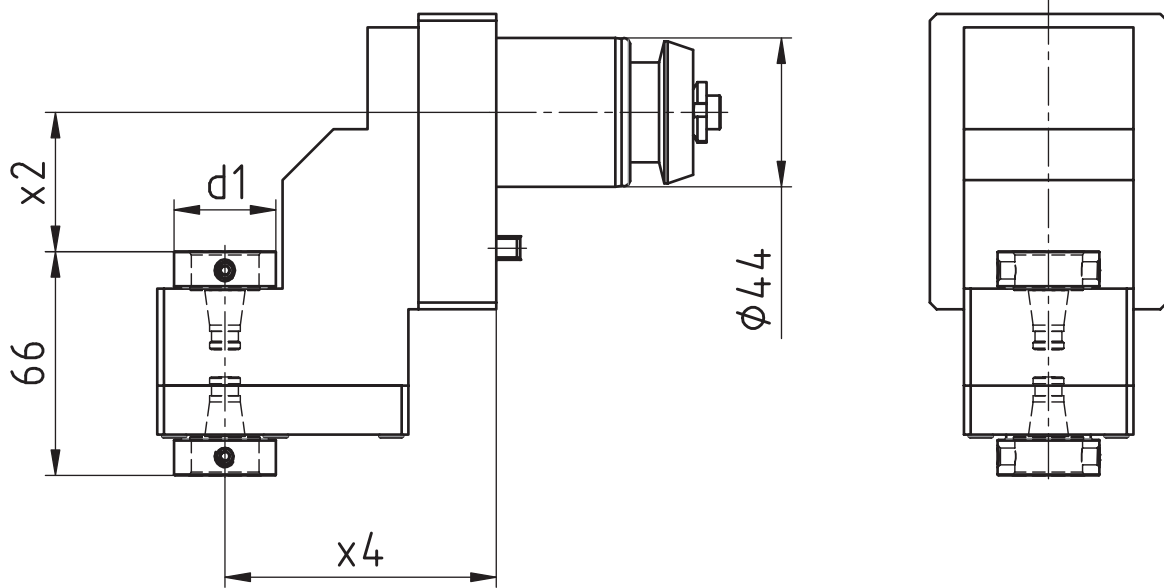
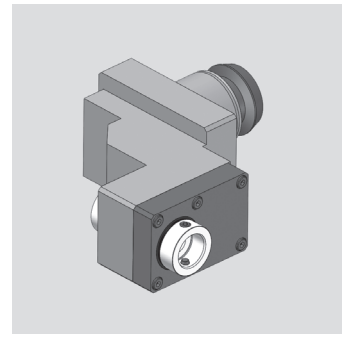
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

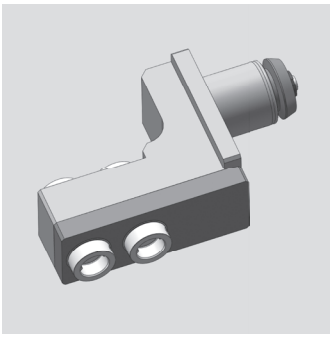
WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4				i				
30	41	80	WFB 20-12	13	8.000	1:1				MPU.Z44.B20.221-56-00

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	ECAS-12/20	SR-20J/ JN	SR-20RIV
	SB-12/20R	SR-20RIII	SR-32J/ JN
	SR-10J	SR-20RII	SW-12RII

<b>Ähnlich OEM Nr.</b> similar to OEM no. semblable au OEM nombre	221-56-00
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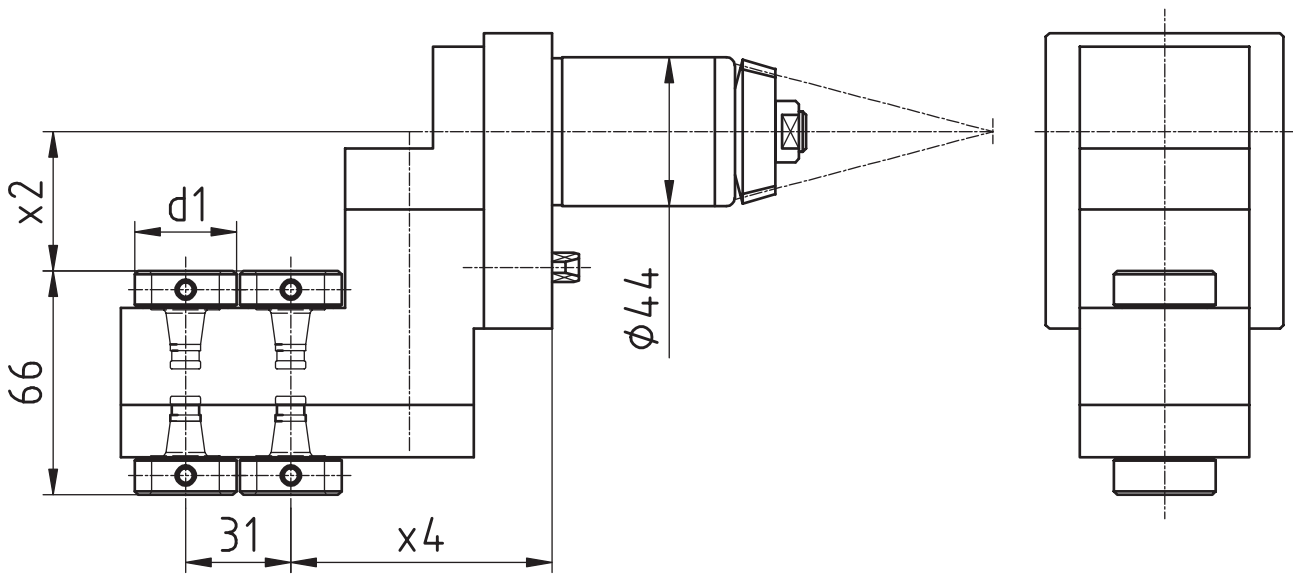
# Star

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	10	8.000	1:1				MPU.Z44.B20.421-59-00

<b>Passend für Maschine:</b>	ST20	SV-20
suitable machines:	ECAS-20T	SV-20R
approprié pour la machine:	SV-12	SV-32JII

<b>Ähnlich OEM Nr.</b>	421-59-00
similar to OEM no.	
semblable au OEM nombre	

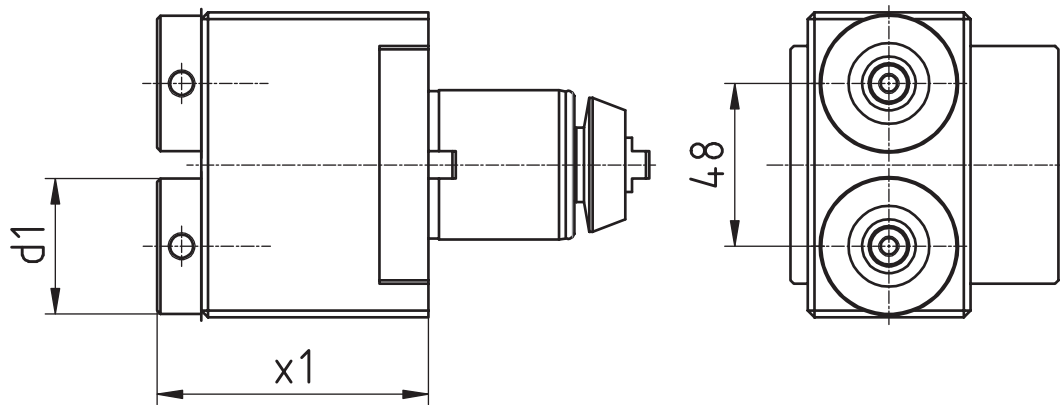
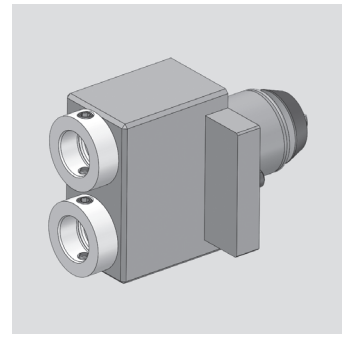
# Star

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>								
40	73,25	WFB 24-16	16	8.000	1:1				MPU.Z44.B24.421-51-00
40	73,25	WFB 24-16	16	8.000	1:1	x	x	80	MPU.Z44.B24.421-51-1K

<b>Passend für Maschine:</b>	ST20	SV-20
suitable machines:	ECAS-20T	SV-20R
approprié pour la machine:	SV-2	SV-32JII

<b>Ähnlich OEM Nr.</b>	421-51-00
similar to OEM no.	
semblable au OEM nombre	





Modulare Aggregatetechnik

**TORNOS**



Werkzeugtechnik



**Katalog  
TO-03**



# Inhaltsverzeichnis für TORNOS

Table of contents for TORNOS  
Table des matières pour TORNOS

Beschreibung / Description	Seite / Page
<b>TORNOS – EvoDECO</b>	<b>7.1 - 7.35</b>
<b>TORNOS – Gamma</b>	<b>7.36 - 7.42</b>
<b>TORNOS – Swiss Baureihen</b>	<b>7.43 - 7.53</b>

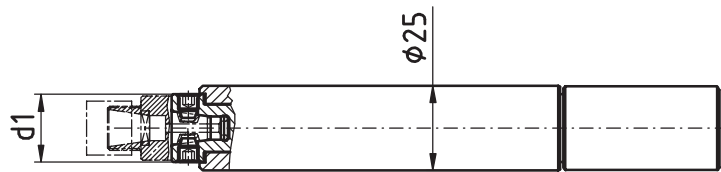
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

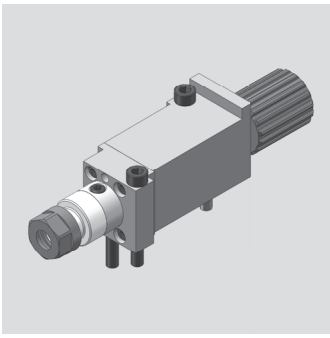
Outil de perçage et de fraisage axiale

WG 35



[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
20	WF-Micro	6	12.000	1:1				MPU.TO.WFM.0110.DE10

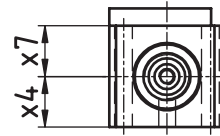
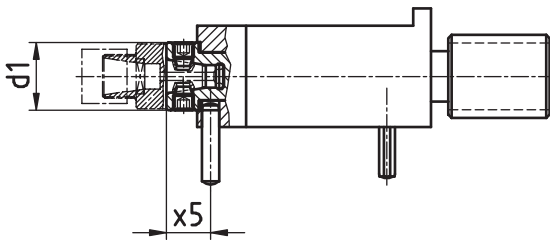
<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



# Tornos - EvoDECO

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x4</b>	<b>x5</b>	<b>x7</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
20	15	13	15	WF-Micro	6	12.000	1:1				MPU.TO.WFM.0115.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8

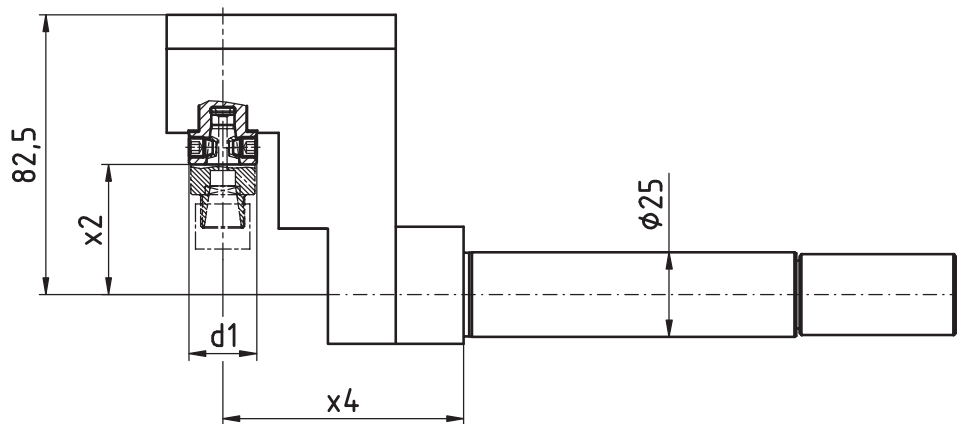
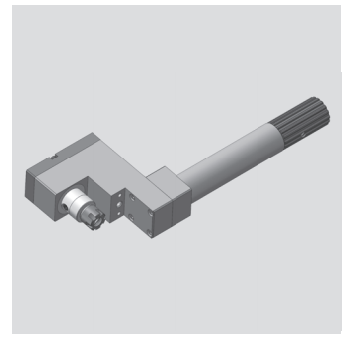
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

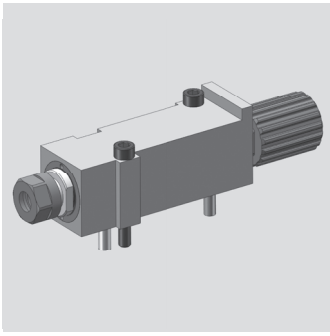
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4				i				
20	38,4	71	WF-Micro	6	12.000	1:1				MPU.TO.WFM.0210.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



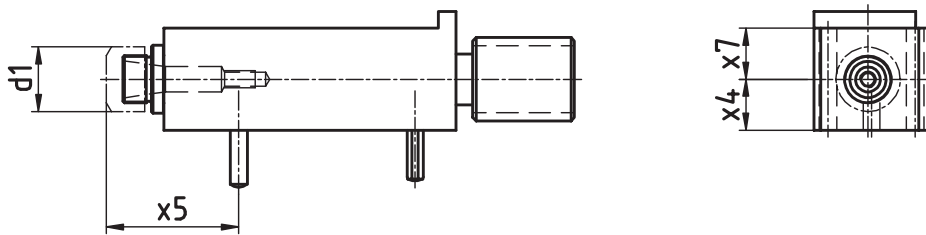
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x4	x5	x7	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
19	15	39	15	ER11	6	12.000	1:1				MPU.TO.0115.DE10
19	30	39	15	ER11	6	12.000	1:1				MPU.TO.0130.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8

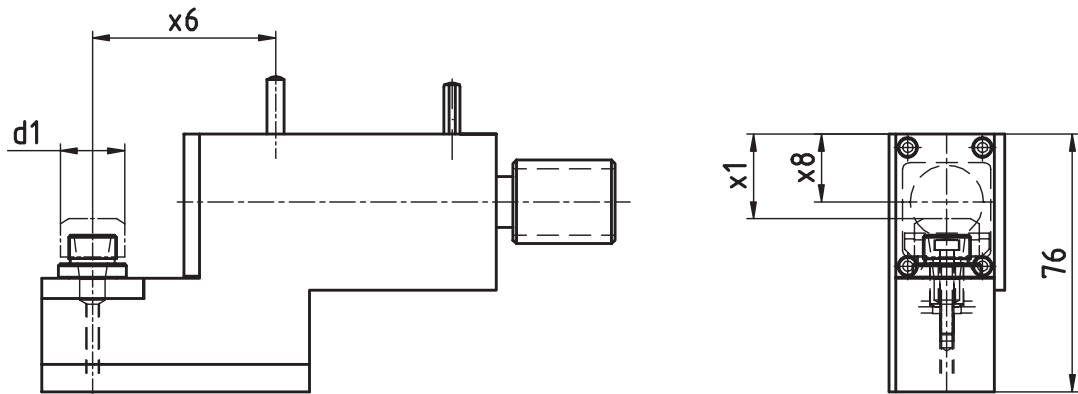
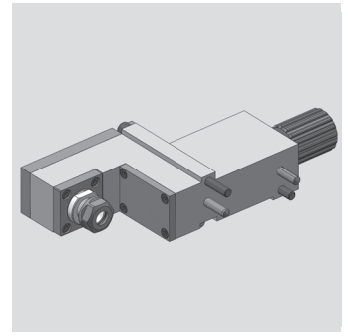
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

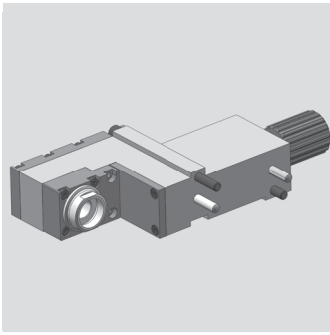
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
19	25	54	20	ER11	6	12.000	1:1				MPU.TO.0200.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



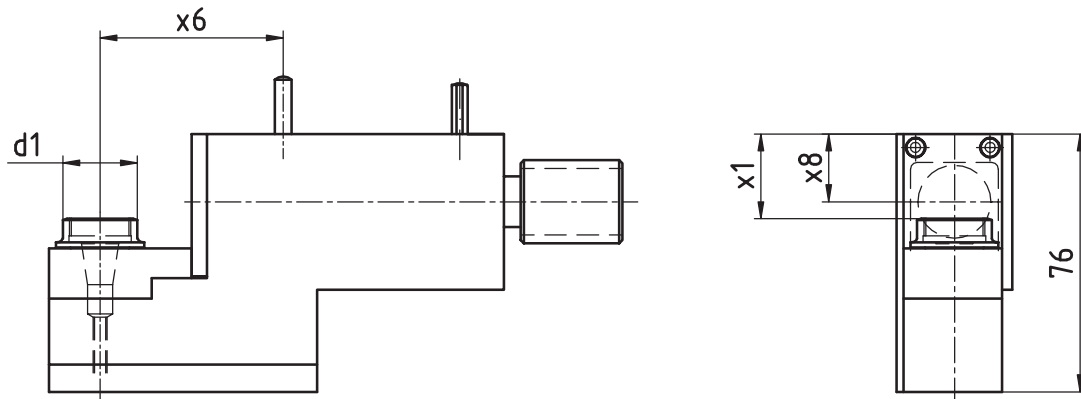
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
22	25	54	20	ER11	6	12.000	1:1				MPU.TO.0200.DE10.X2

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



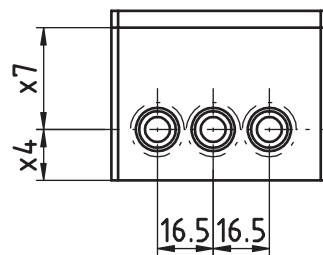
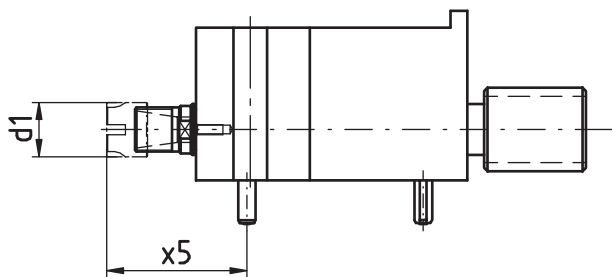
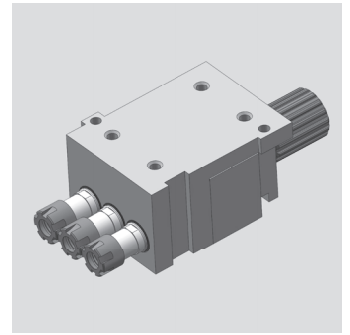
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

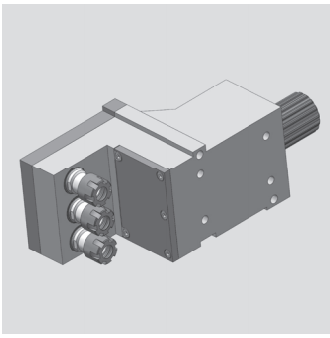
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x4</b>	<b>x5</b>	<b>x7</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
16	15	41,3	30	ER11 MINI	5	12.000	1:1				MPU.TO.1103.DE10
16	30	41,3	30	ER11 MINI	5	12.000	1:1				MPU.TO.1203.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



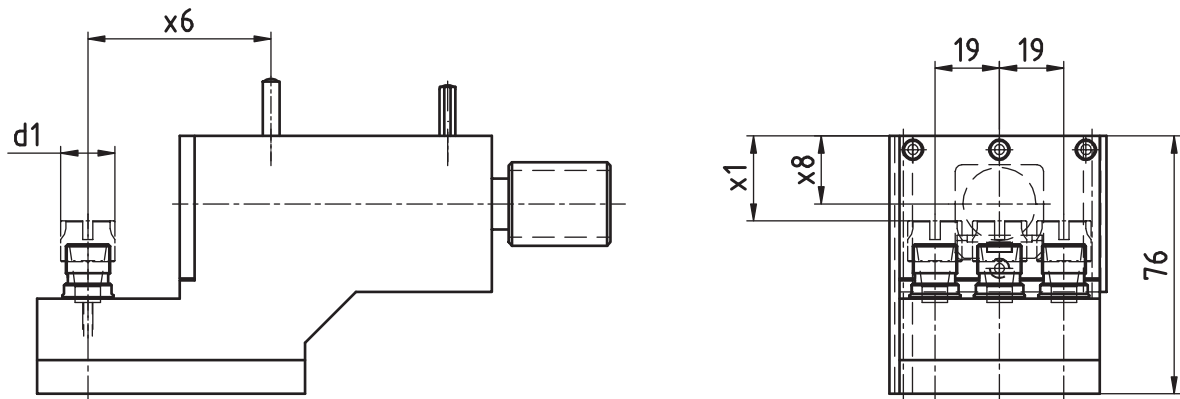
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
16	25	54	20	ER11 MINI	6	12.000	1:1				MPU.TO.2103.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8

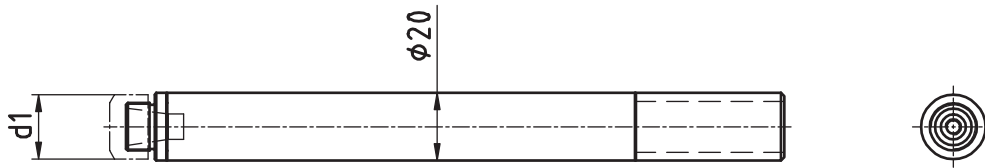
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1				i				
19	ER11	6	12.000	1:1				MPU.TO.0120.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



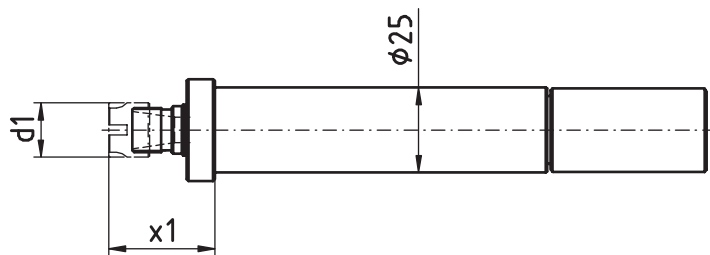
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
16	31,3	ER11 MINI	6	12.000	1:1				MPU.TO.0110.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8

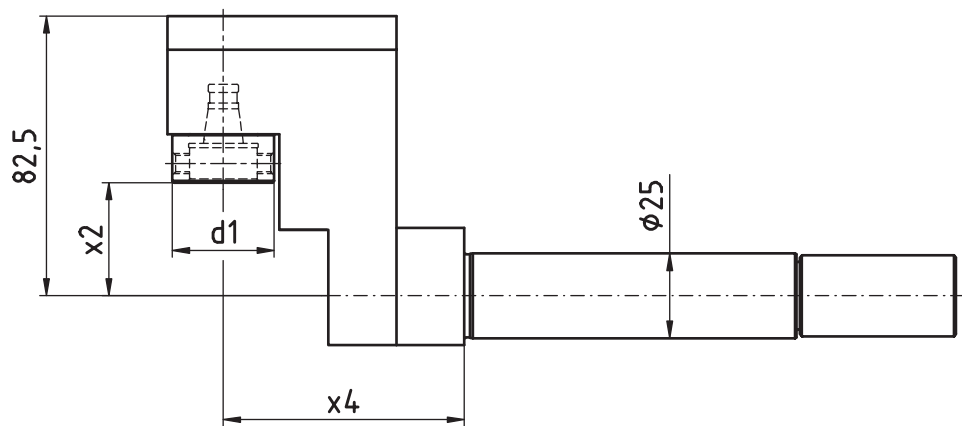
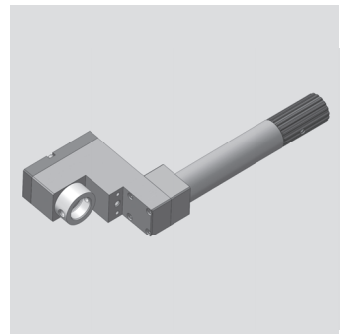
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

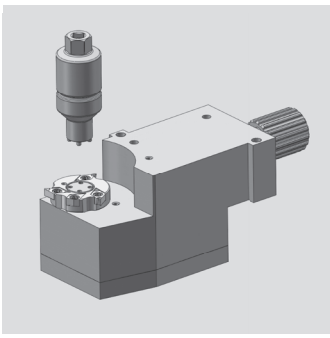
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4				i				
16	31,3	71	WFB 20-12	6	12.000	1:1				MPU.TO.0210.DE10

Passend für Maschine:	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



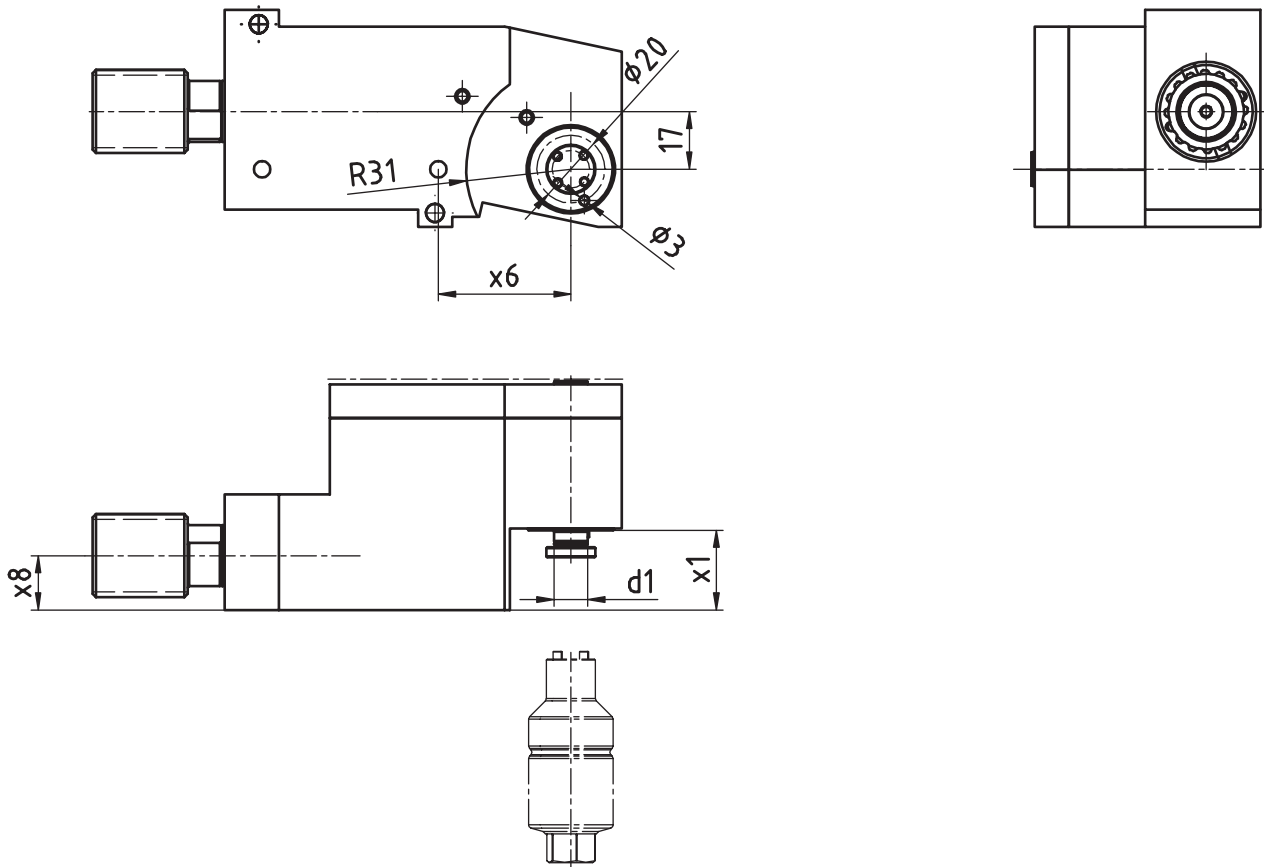
# Tornos - EvoDECO

## Radial-Bohr- und Fräskopf (Mehrkantschlagen)

radial drilling and milling head (polyhedral beat)

Outil Rotatif Radial de Pertage et de Fraisage (battement polyedrique)

**WG 35**



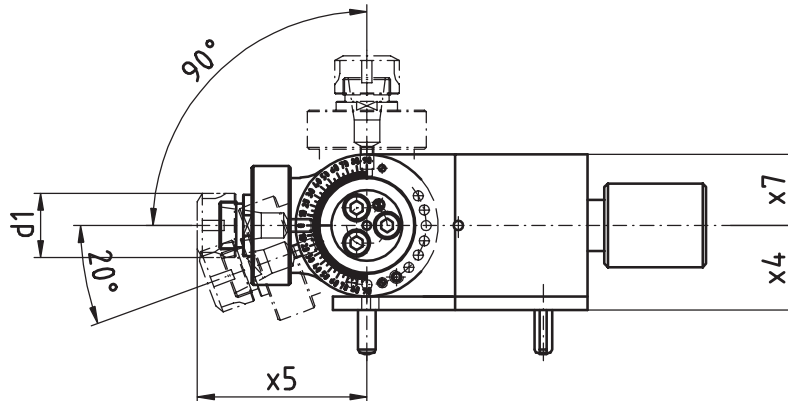
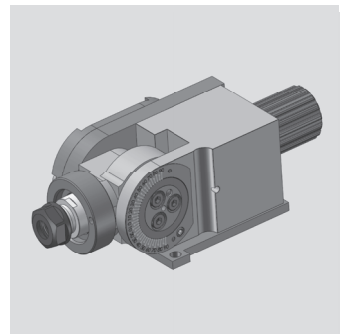
[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
10	23,5	39	16		8	12.000	1:1,333				MPU.TO.0900.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8

# Tornos - EvoDECO

**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x4	x5	x7		T max	n max	i			p	
19	25	50	21	ER11	6	12.000	1:1				MPU.TO.0300.DE10

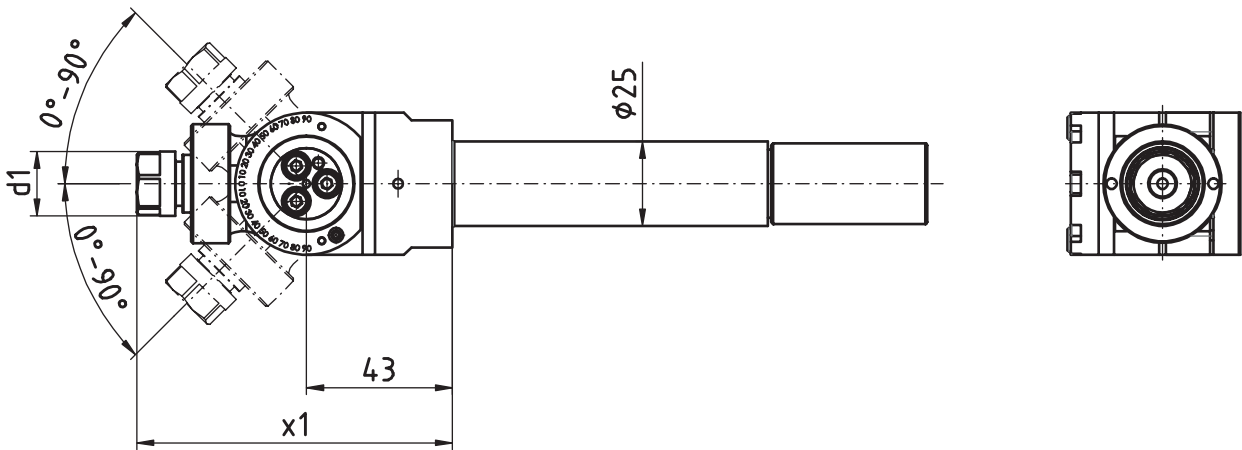
<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



# Tornos - EvoDECO

**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	6	12.000	i				MPU.TO.0310.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



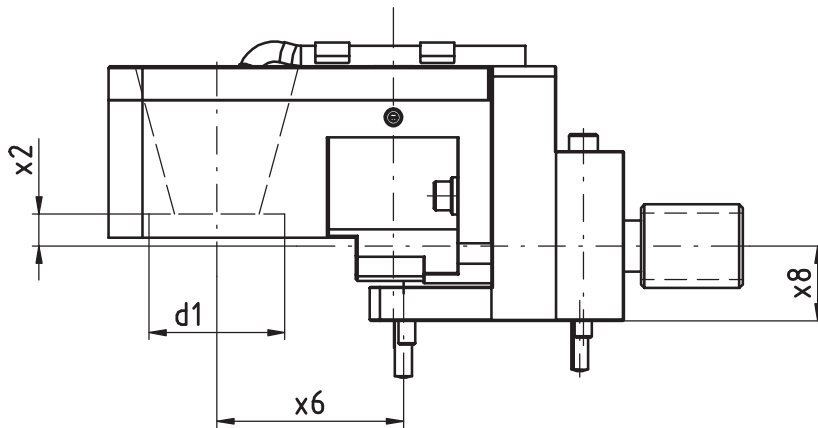
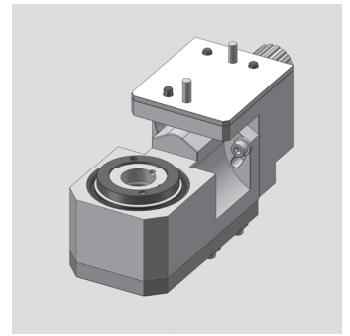
# Tornos - EvoDECO

## Gewindewirbelapparat

Thread whirling unit

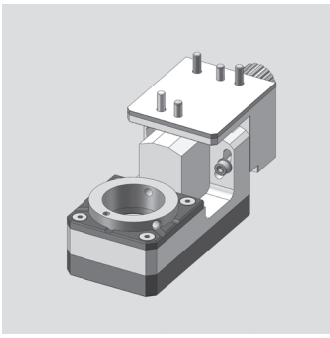
Unité de tourbillonnement

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
40	9,5	55	22	Tornos org.	6	12.000	1:1	x			MPU.TO.0800.DE10

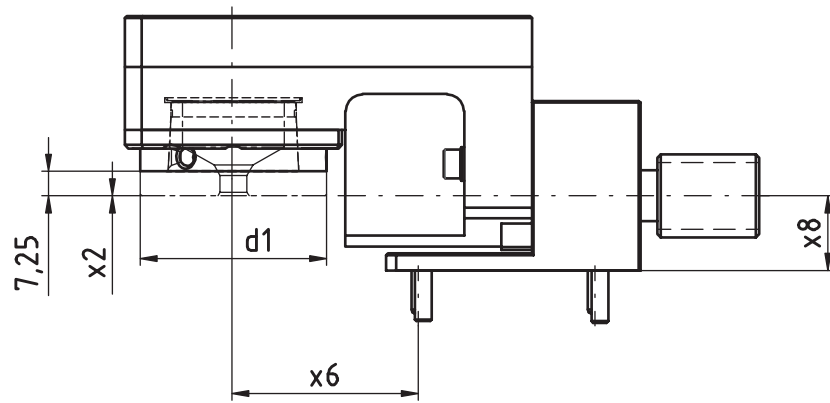
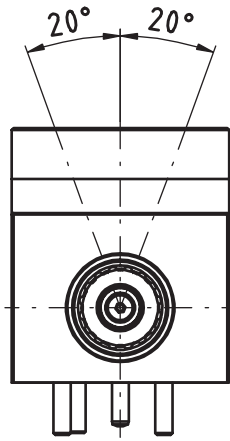
<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8



# Tornos - EvoDECO

Gewindewirbelapparat modular  
 Thread whirling unit  
 Unité de tourbillonnement

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
54	0	55	22	WFW 50	6	12.000	1:1	x			MPU.TO.M0800.DE10

<b>Passend für Maschine:</b>	DECO 10
suitable machines:	EvoDECO 10/10
approprié pour la machine:	EvoDECO 10/8

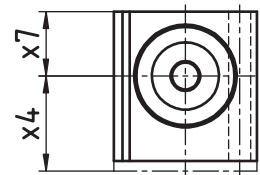
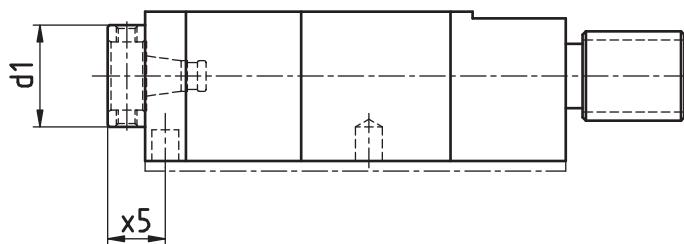
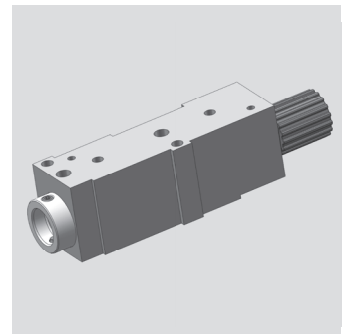
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

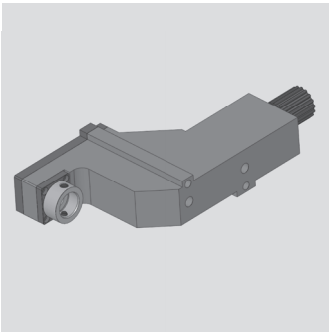
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x4</b>	<b>x5</b>	<b>x7</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	28	7	19	WFB 20-12	8	8.000	1:1				MPU.TO.0100.DE13
30	28	17	19	WFB 20-12	8	8.000	1:1				MPU.TO.0110.DE13
30	28	33	19	WFB 20-12	8	8.000	1:1				MPU.TO.0120.DE13
30	28	17	36	WFB 20-12	3	24.000	1:3				MPU.TO.0130.DE13
30	28	7	36	WFB 20-12	3	24.000	1:3		x	80	MPU.TO.0100.DE13H
30	28	17	36	WFB 20-12	3	24.000	1:3		x	80	MPU.TO.0110.DE13H
30	28	33	36	WFB 20-12	3	24.000	1:3		x	80	MPU.TO.0120.DE13H
30	28	7	36	WFB 20-12	8	8.000	1:1		x	80	MPU.TO.0100.DE13H1
30	28	33	36	WFB 20-12	8	8.000	1:1		x	80	MPU.TO.0120.DE13H1

**Passend für Maschine:** DECO 13 EvoDECO 16/10  
 suitable machines: DECO 16 EvoDECO 16/8  
 approprié pour la machine:



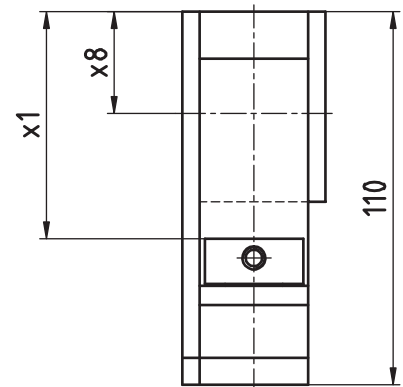
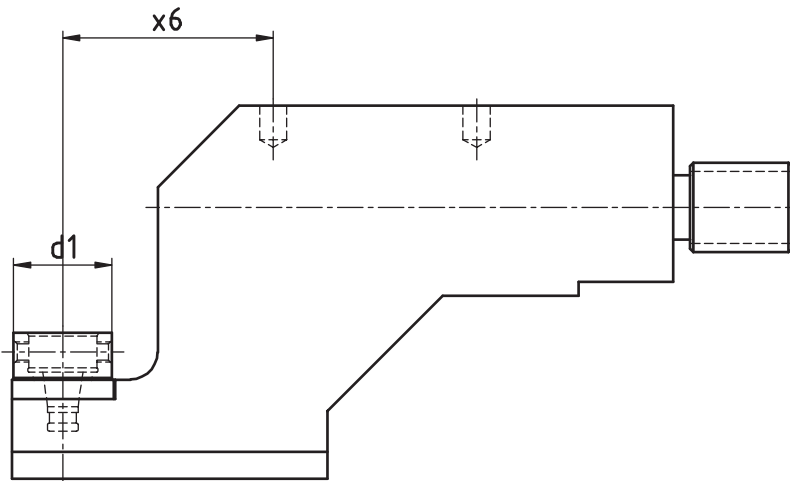
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	67	62	30	WFB 20-12	8	8.000	1:1				MPU.TO.0200.DE13

<b>Passend für Maschine:</b>	DECO 13	EvoDECO 16/10
suitable machines:	DECO 16	EvoDECO 16/8
approprié pour la machine:		

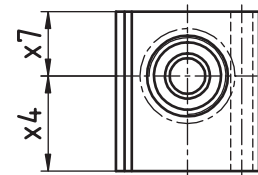
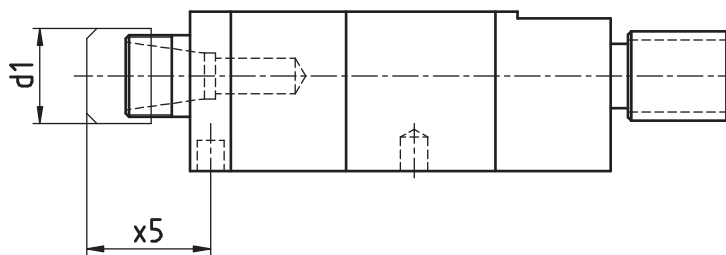
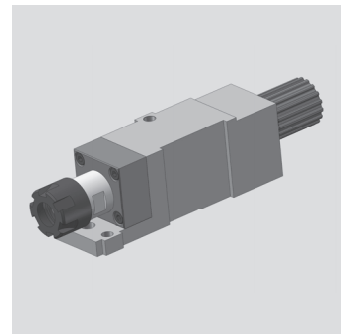
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

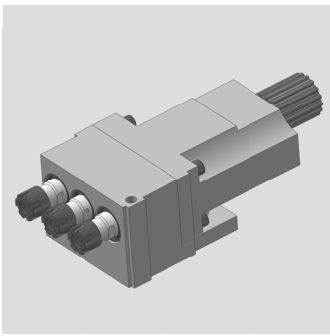
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x4	x5	x7	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
28	28	26,5	19	ER20 MINI	8	8.000	1:1				MPU.TO.0100.DE13.ER20M
28	28	36,5	19	ER20 MINI	8	8.000	1:1				MPU.TO.0110.DE13.ER20M
28	28	71,5	19	ER20 MINI	8	8.000	1:1				MPU.TO.0120.DE13.ER20M

<b>Passend für Maschine:</b>	DECO 13	EvoDECO 16/10
suitable machines:	DECO 16	EvoDECO 16/8
approprié pour la machine:		



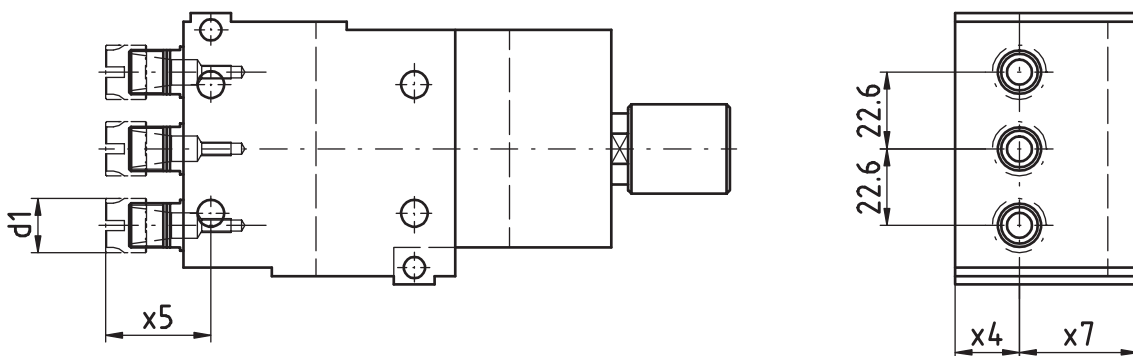
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x4	x5	x7		T max	n max	i			p	
16	19	31	35	ER11 MINI	8	8.000	1:1				MPU.TO.1103.DE13

<b>Passend für Maschine:</b>	DECO 13	EvoDECO 16/10
suitable machines:	DECO 16	EvoDECO 16/8
approprié pour la machine:		

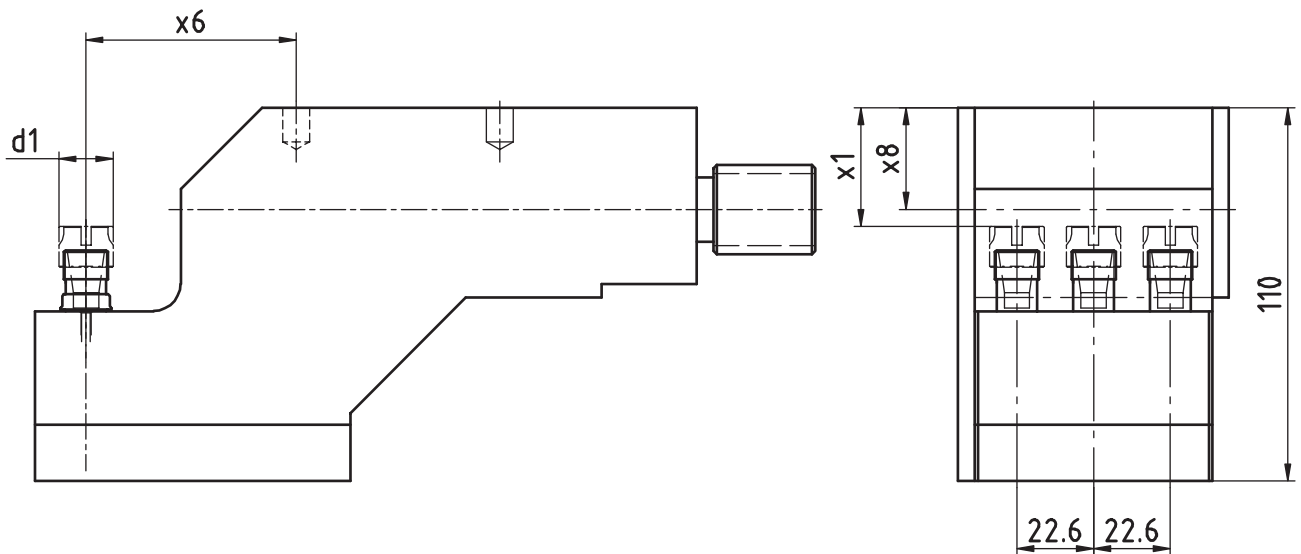
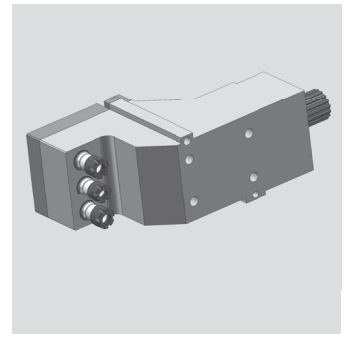
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

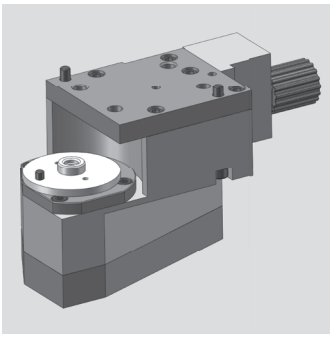
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
16	35	62	80	ER11 MINI	8	8.000	1:1				MPU.TO.2103.DE13

<b>Passend für Maschine:</b>	DECO 13	EvoDECO 16/10
suitable machines:	DECO 16	EvoDECO 16/8
approprié pour la machine:		



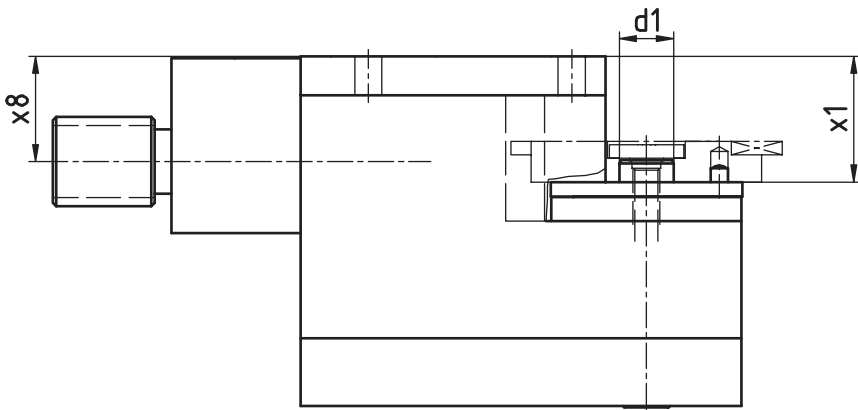
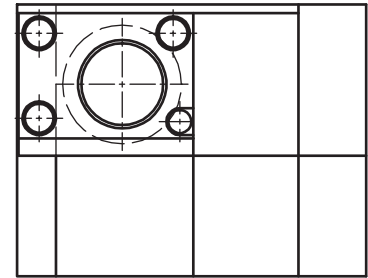
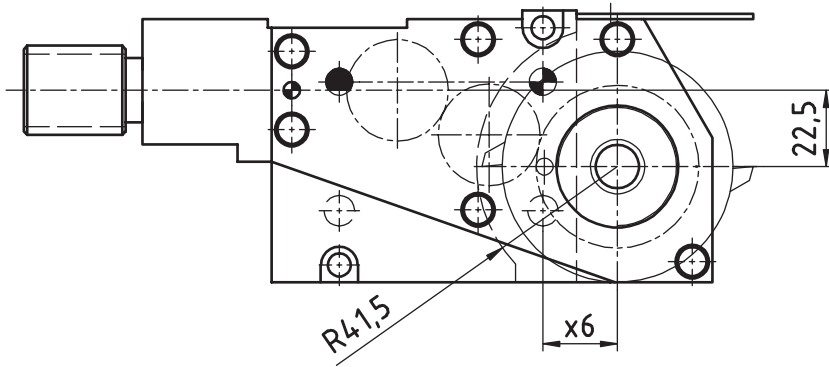
# Tornos - EvoDECO

## Radial-Bohr- und Fräskopf (Mehrkantschlagen)

radial drilling and milling head (polyhedral beat)

Outil Rotatif Radial de Pertage et de Fraisage (battement polyedrique)

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
16	37	22	31		16	5.000	1,6:1				MPU.TO.0900.DE13

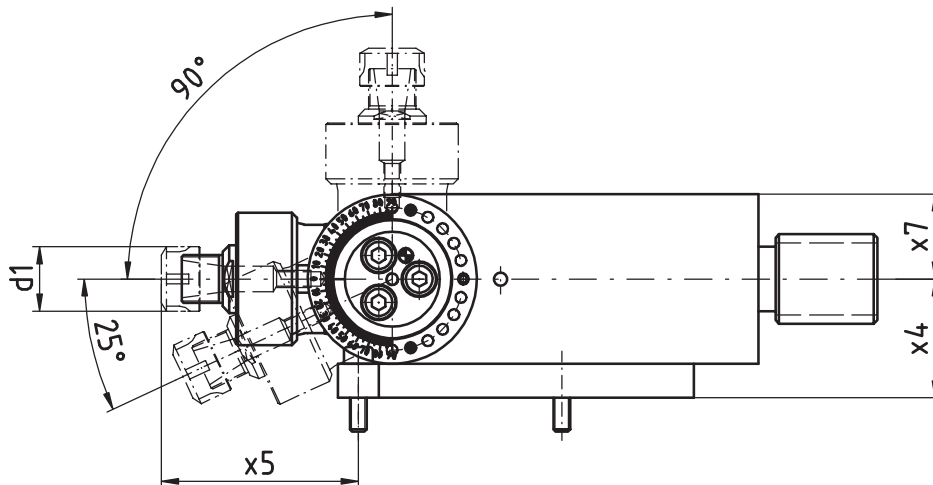
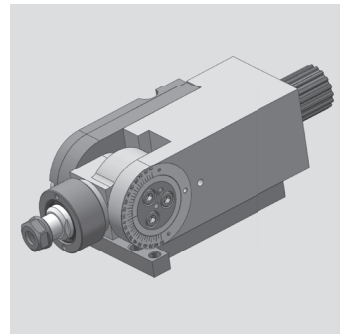
Passend für Maschine: sutable machines: approprié pour la machine:	DECO 13	EvoDECO 16/10
	DECO 16	EvoDECO 16/8



# Tornos - EvoDECO

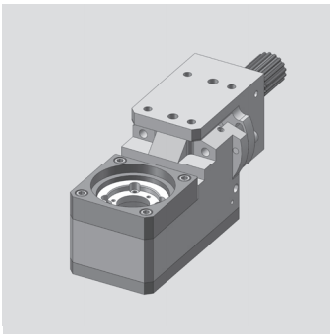
**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x4	x5	x7		T max	n max	i			p	
19	35	58	25	ER11	8	8.000	1:1				MPU.TO.0300.DE13

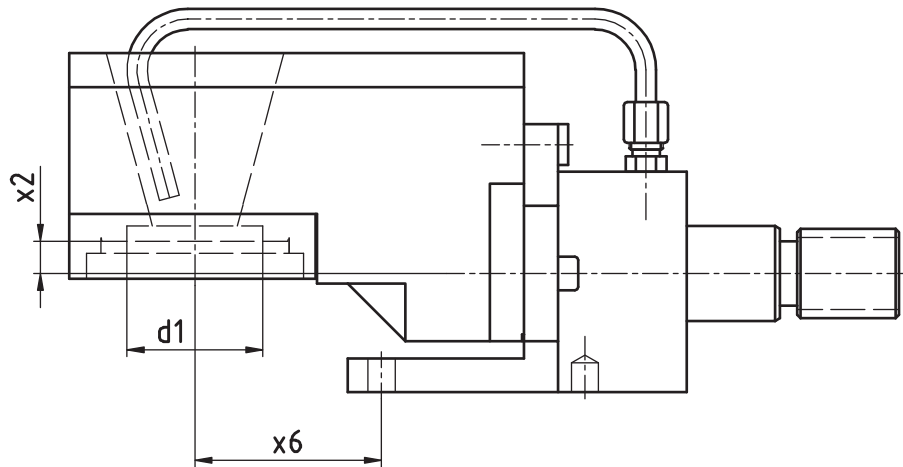
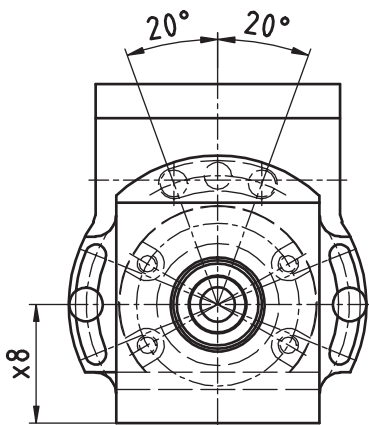
<b>Passend für Maschine:</b>	DECO 13	EvoDECO 16/10
suitable machines:	DECO 16	EvoDECO 16/8
approprié pour la machine:		



# Tornos - EvoDECO

**Gewindewirbelapparat**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



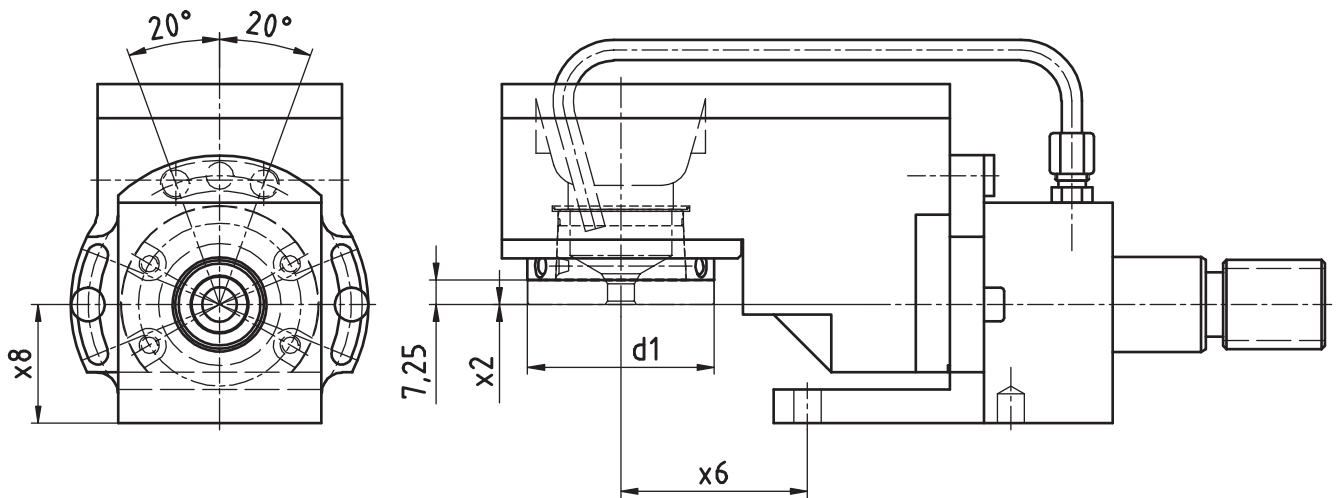
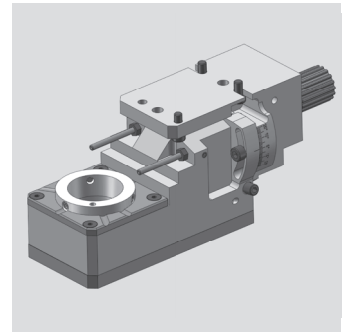
[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
40	9,5	55	35	Tornos org.	16	8.000	1:1	x			MPU.TO.0800.DE13

<b>Passend für Maschine:</b>	DECO 13	EvoDECO 16/10
suitable machines:	DECO 16	EvoDECO 16/8
approprié pour la machine:		

# Tornos - EvoDECO

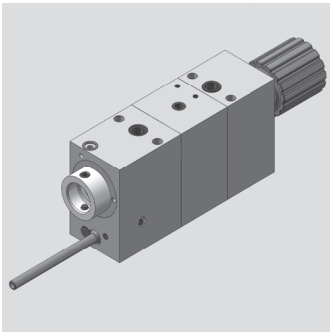
**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x6	x8		T max	n max	i			p	
54	0	55	35	WFW 50	16	8.000	1:1	x			MPU.TO.M0800.DE13

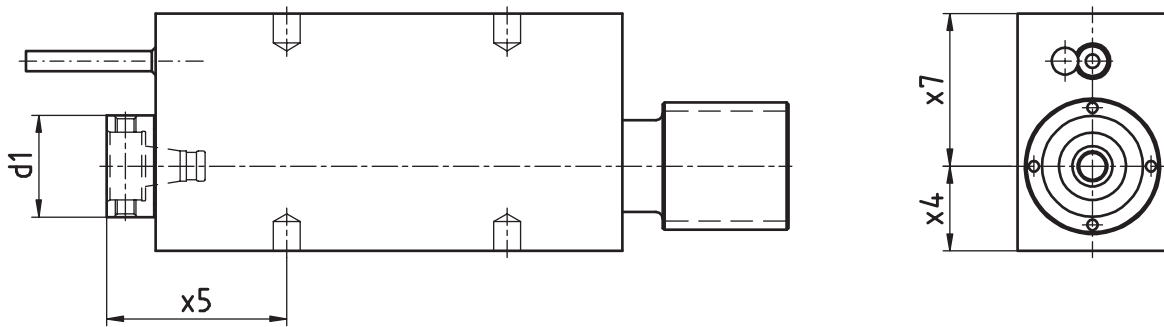
**Passend für Maschine:** DECO 13    EvoDECO 16/10  
 suitable machines:    DECO 16    EvoDECO 16/8  
 approprié pour la machine:



# Tornos - EvoDECO

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x4</b>	<b>x5</b>	<b>x7</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	25	53	45	WFB 20-12	16	8.000	1:1	x			MPU.TO.0100.DE20-H25
30	25	53	45	WFB 20-12	16	8.000	1:1	x	x	170	MPU.TO.0100.DE20H1
30	25	53	45	WFB 20-12	8	14.544	1:1,818	x	x	170	MPU.TO.0100.DE20H2
30	27	53	43	WFB 20-12	16	8.000	1:1	x			MPU.TO.0100.DE20-H27
30	25	80	45	WFB 20-12	16	8.000	1:1	x			MPU.TO.0110.DE20
30	25	80	45	WFB 20-12	16	8.000	1:1	x	x	170	MPU.TO.0110.DE20H1
30	25	80	45	WFB 20-12	8	14.544	1:1,818	x	x	170	MPU.TO.0110.DE20H2
30	25	114	45	WFB 20-12	16	8.000	1:1	x			MPU.TO.0120.DE20
30	25	114	45	WFB 20-12	8	14.544	1:1,818	x	x	170	MPU.TO.0120.DE20H2

**Passend für Maschine:** DECO 20    EvoDECO 20  
 suitable machines: DECO 26    EvoDECO 32  
 approprié pour la machine:

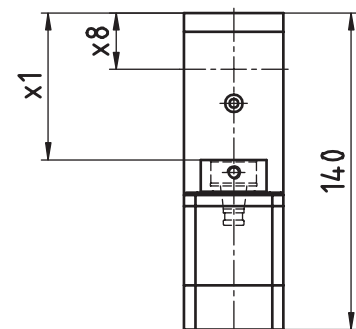
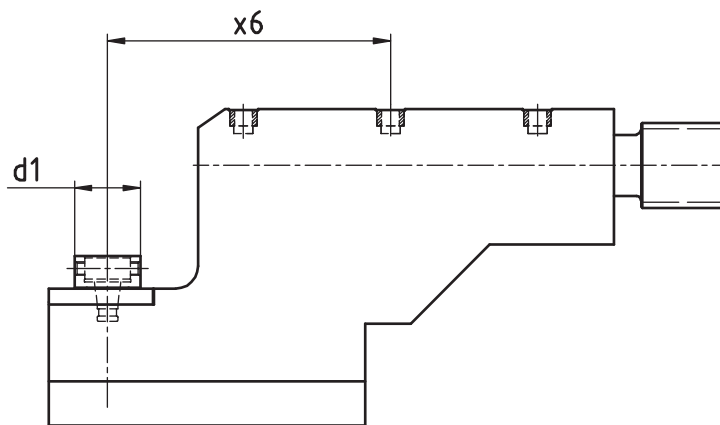
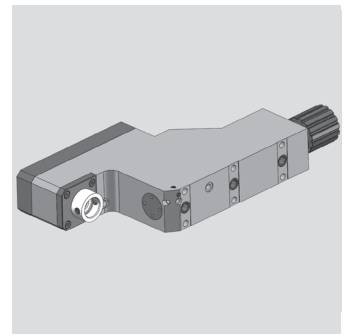
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

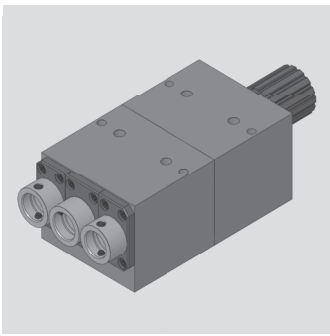
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	65	125	25	WFB 20-12	8	8.000	1:1	x			MPU.TO.0200.DE20

<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		



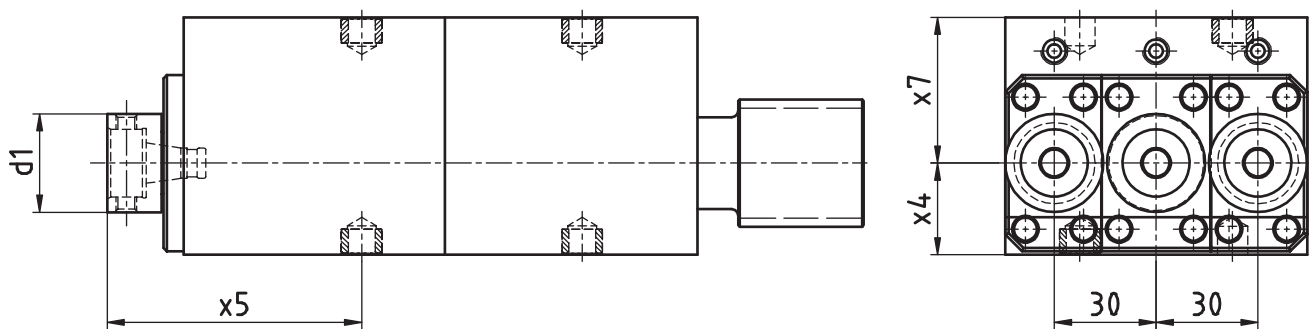
# Tornos - EvoDECO

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x4	x5	x7	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	23	75	47	WFB 20-12	8	8.000	1:1	x			MPU.TO.1103.DE20

<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		

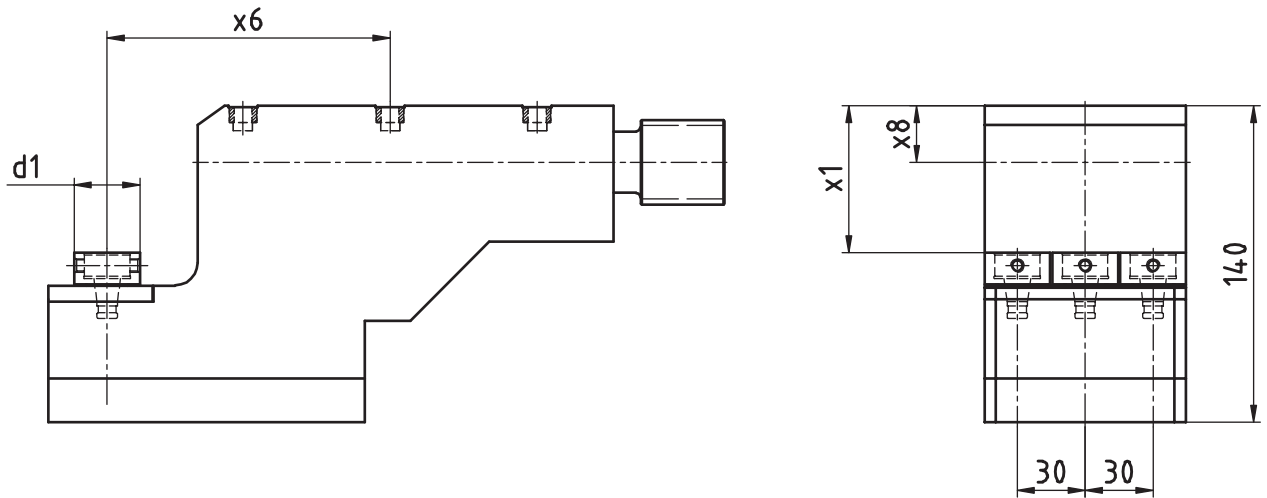
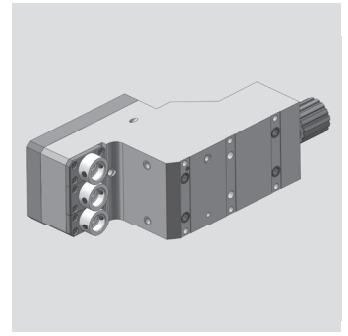
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

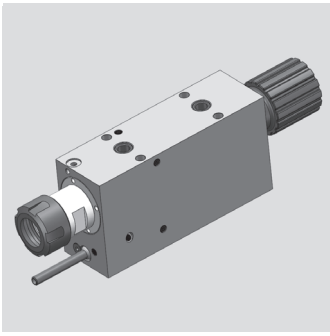
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
29	23	125	25	WFB 20-12	8	8.000	1:1	x			MPU.TO.2103.DE20

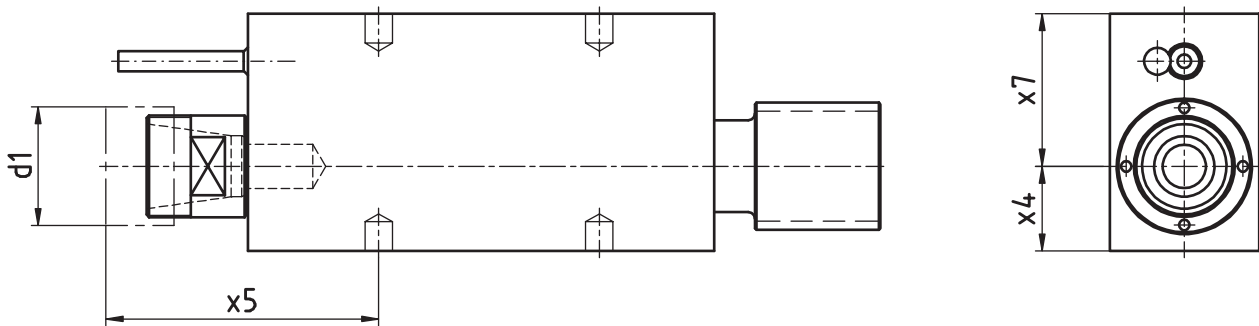
<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		



# Tornos - EvoDECO

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x4	x5	x7		T max	n max	i			p	
35	25	80	45	ER25 MINI	16	8.000	1:1	x			MPU.TO.0100.DE20.ER25M
35	25	110	45	ER25 MINI	16	8.000	1:1	x			MPU.TO.0110.DE20.ER25M
35	25	145	45	ER25 MINI	16	8.000	1:1	x			MPU.TO.0120.DE20.ER25M

<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		



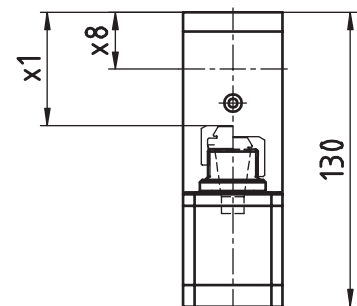
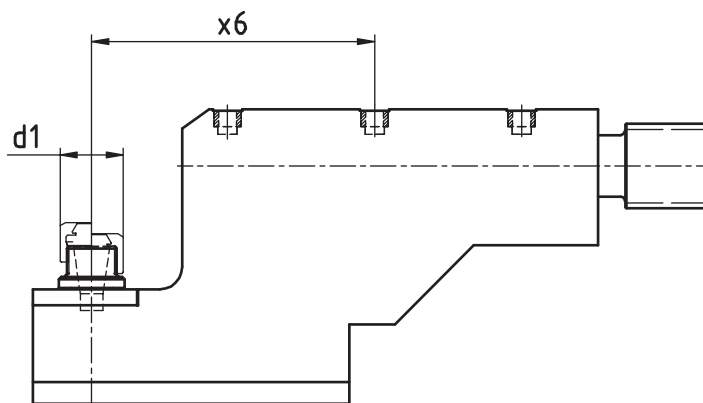
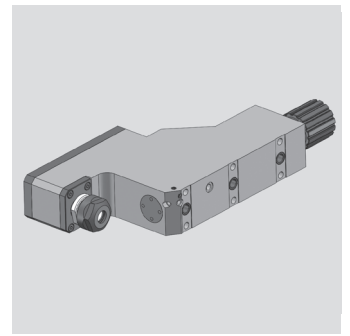
# Tornos - EvoDECO

## Radial Bohr- und Fräskopf

Radial drilling and milling head

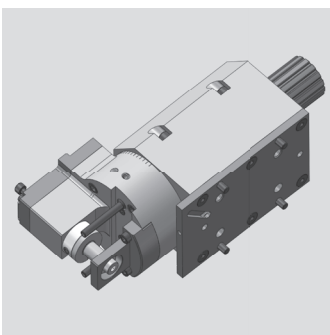
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
28	50	125	25	ER16	8	8.000	1:1	x			MPU.TO.0210.DE20

<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		



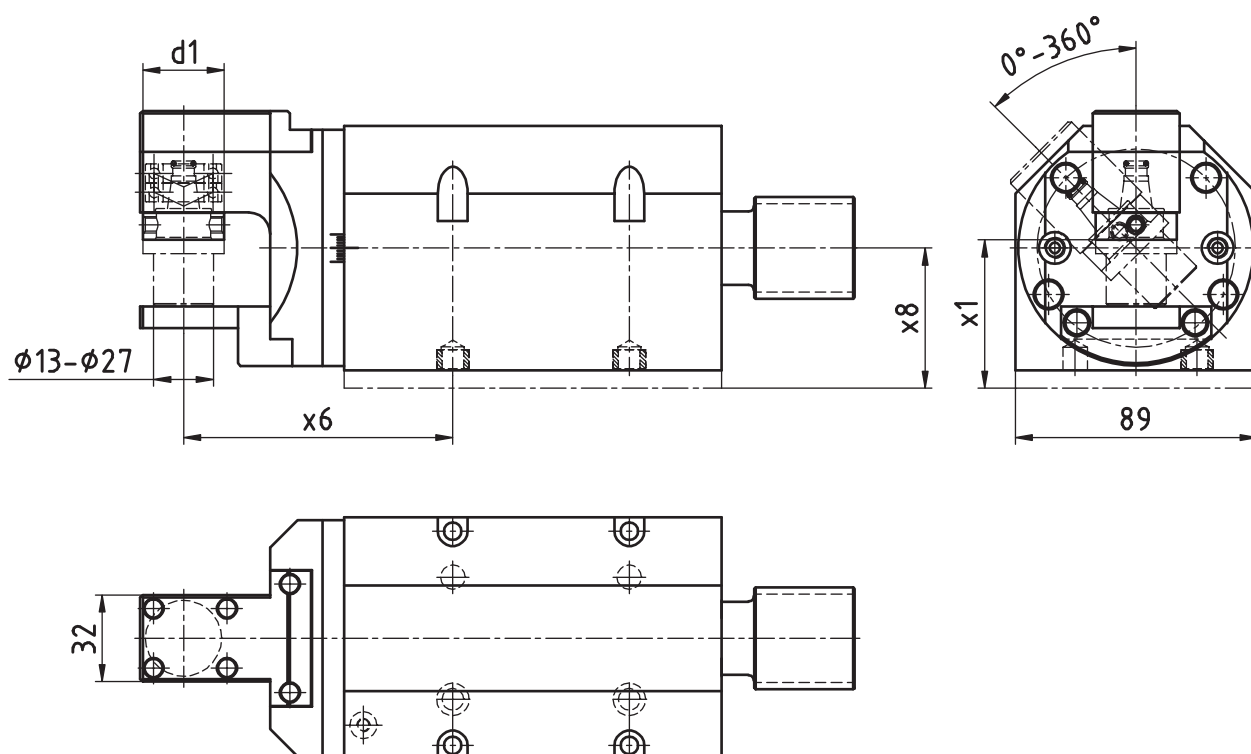
# Tornos - EvoDECO

## Radial-Bohr- und Fräskopf (Mehrkantschlagen)

radial drilling and milling head (polyhedral beat)

Outil Rotatif Radial de Pertage et de Fraisage (battement polyedrique)

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x1	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	54,7	99,25	51,7	WFB 20-12	16	8.000	1:1	x			MPU.TO.0900.DE20

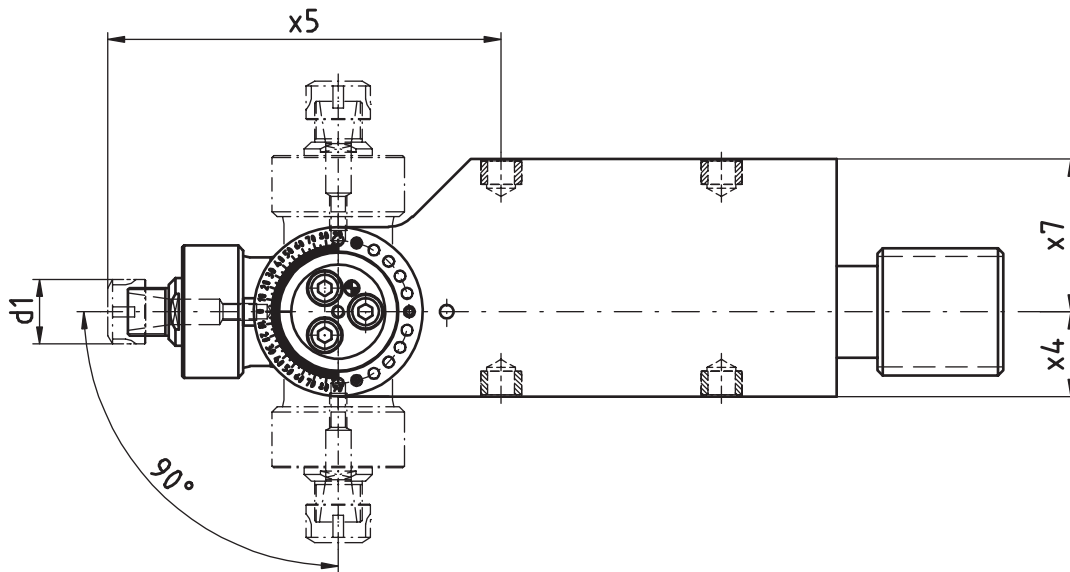
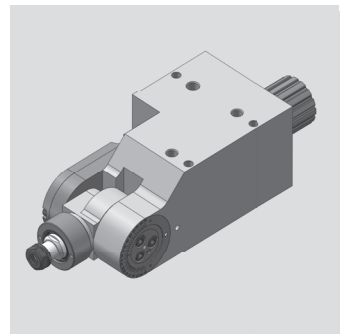
<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		

**Achtung! Einsetzbar als schwenbarer Winkelkopf**  
attention! Useable as angle toolholder adjustable  
attention! applicable en tant que tête d angle pivotante

# Tornos - EvoDECO

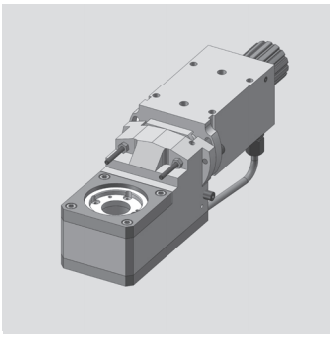
**Bohr- und Fräskopf winkelverstellbar**  
 Drilling and milling swivel head  
 Outil de perçage et de fraisage tournant

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x4</b>	<b>x5</b>	<b>x7</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
19	25	116	45	ER11	8	8.000	1:1				MPU.TO.0300.DE20
19	25	148	45	ER11	8	8.000	1:1				MPU.TO.0310.DE20

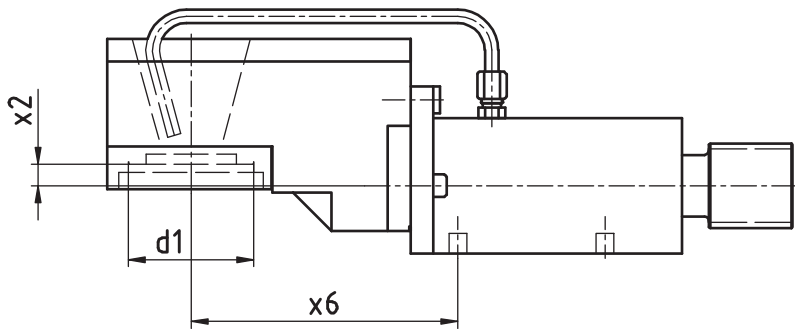
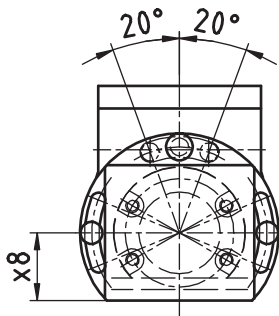
<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		



# Tornos - EvoDECO

**Gewindewirbelapparat**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



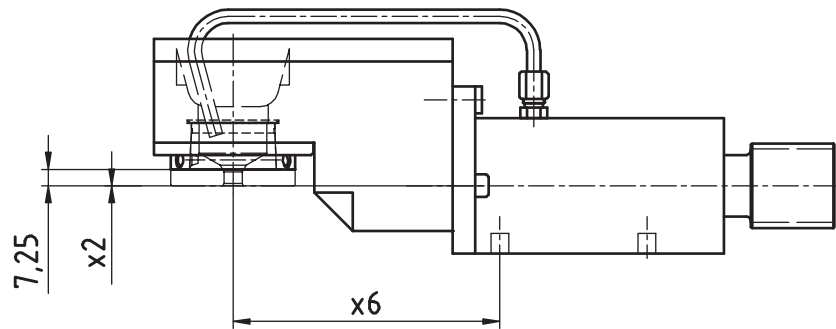
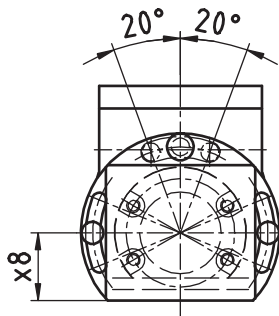
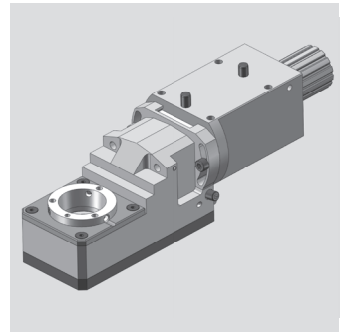
[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x6	x8		T max	n max	i			p	
40	9,5	118	35	Tornos org.	16	8.000	1:1	x			MPU.TO.0800.DE20

<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		

# Tornos - EvoDECO

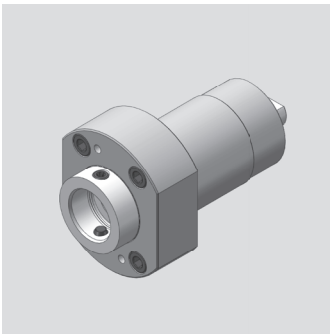
**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x6	x8		T max	n max	i			p	
54	0	118	30	WFW 50	16	8.000	1:1	x			MPU.TO.M0800.DE20

<b>Passend für Maschine:</b>	DECO 20	EvoDECO 20
suitable machines:	DECO 26	EvoDECO 32
approprié pour la machine:		



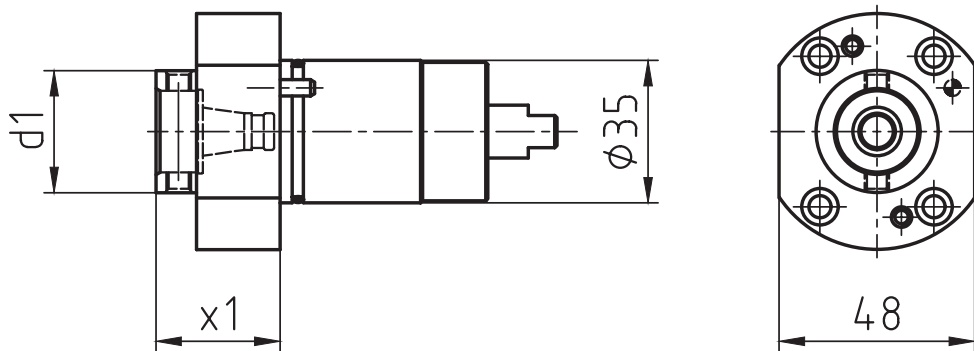
# Tornos - Gamma

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	10	8.000	1:1				MPU.Z35.B20.AA0.GA

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Gamma 20
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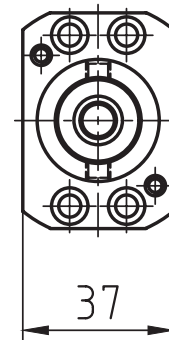
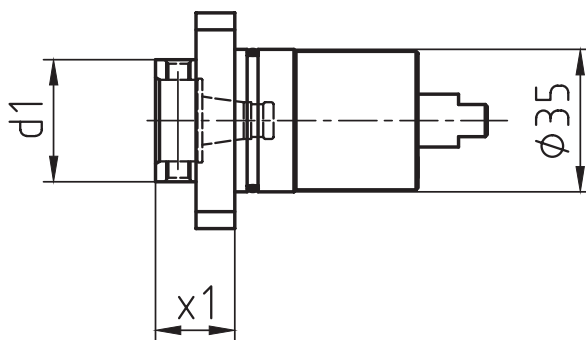
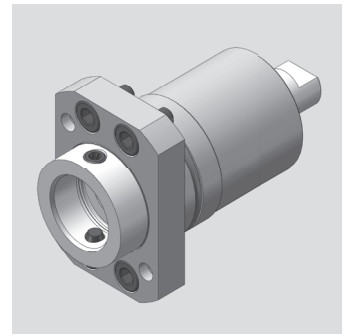
# Tornos - Gamma

## Axial Bohr- und Fräskopf

Axial drilling and milling head

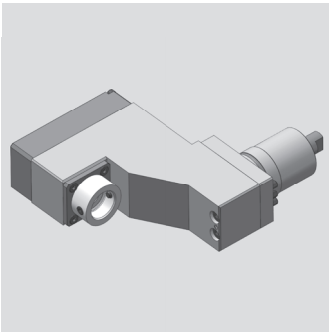
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
30	30,5	WFB 20-12	10	8.000	1:1				MPU.Z35.B20.AA0.GAR

**Passend für Maschine:** Gamma 20  
 suitable machines:  
 approprié pour la machine:



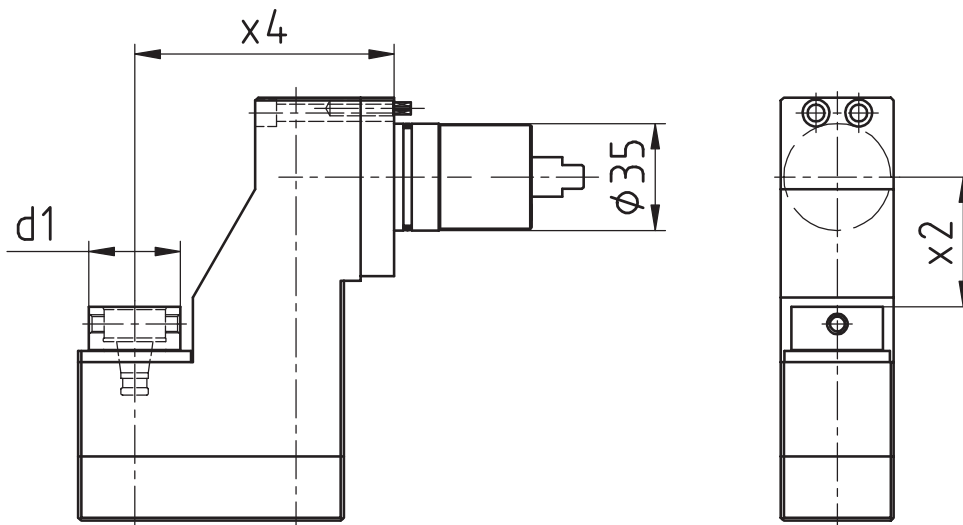
# Tornos - Gamma

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	42,5	85	WFB 20-12	10	8.000	1:1				MPU.Z35.B20.RA0.GA

<b>Passend für Maschine:</b>	Gamma 20
suitable machines:	
approprié pour la machine:	



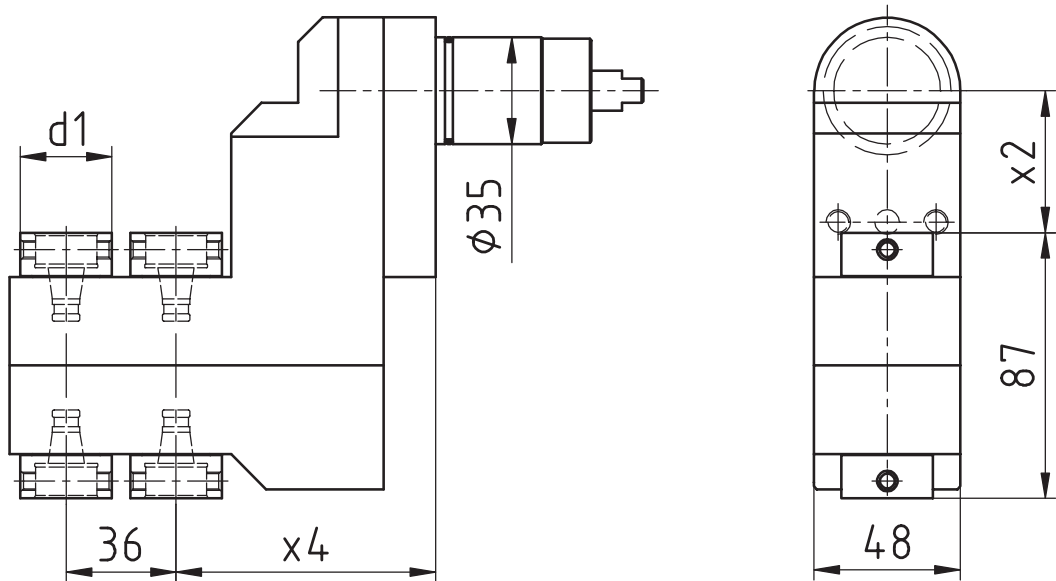
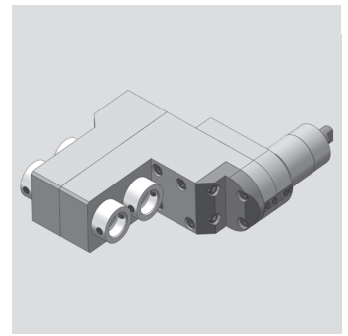
# Tornos - Gamma

## Radial Bohr- und Fräskopf

Radial drilling and milling head

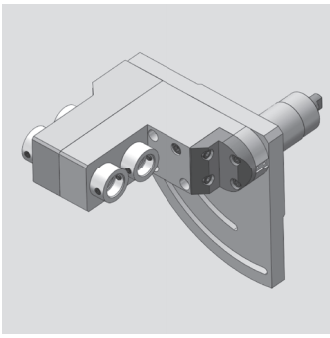
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4				i				
30	46,5	85	WFB 20-12	3	8.000	1:1				MPU.Z35.B20.4A0.GA

Passend für Maschine: Gamma 20  
 suitable machines:  
 approprié pour la machine:



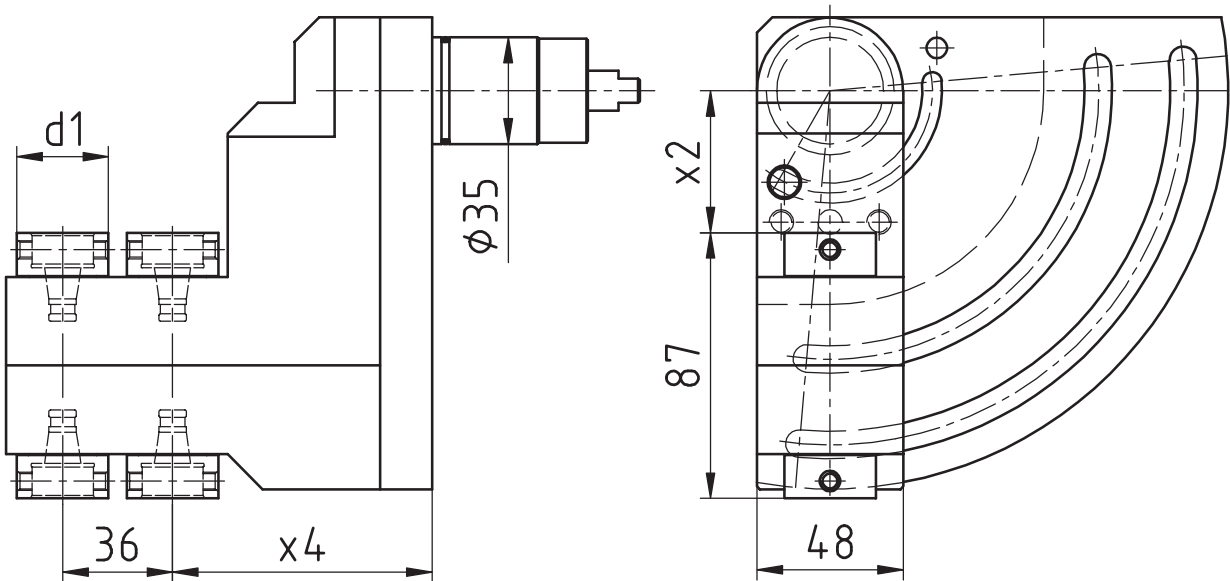
# Tornos - Gamma

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer
30	46,5	85	WFB 20-12	3	8.000	1:1			MPU.Z35.B20.4S0.GA

Passend für Maschine: Gamma 20  
 suitable machines:  
 approprié pour la machine:

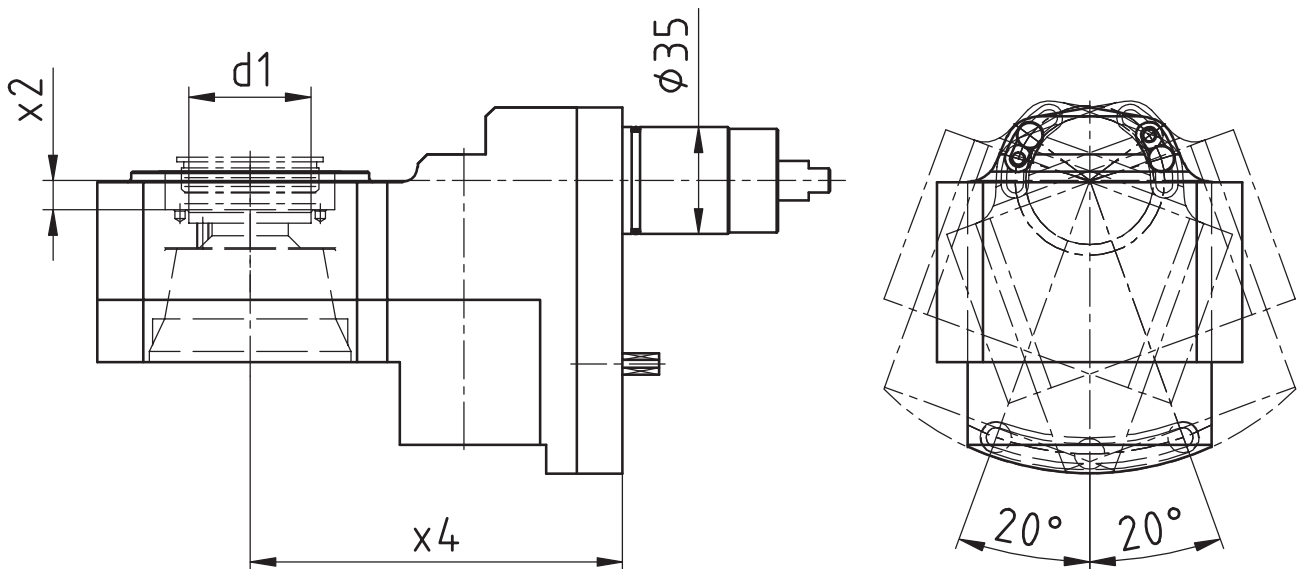
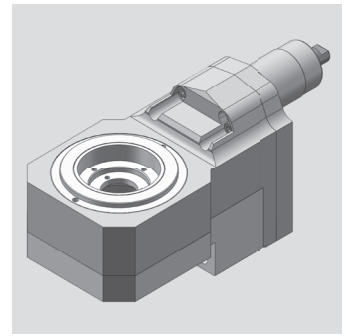
# Tornos - Gamma

## Gewindewirbelapparat

Thread whirling unit

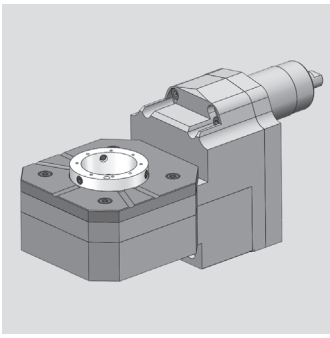
Unité de tourbillonnement

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
40	9,5	122	MONO	16	6.932	1,154:1	x			MPU.Z35.0800.GA

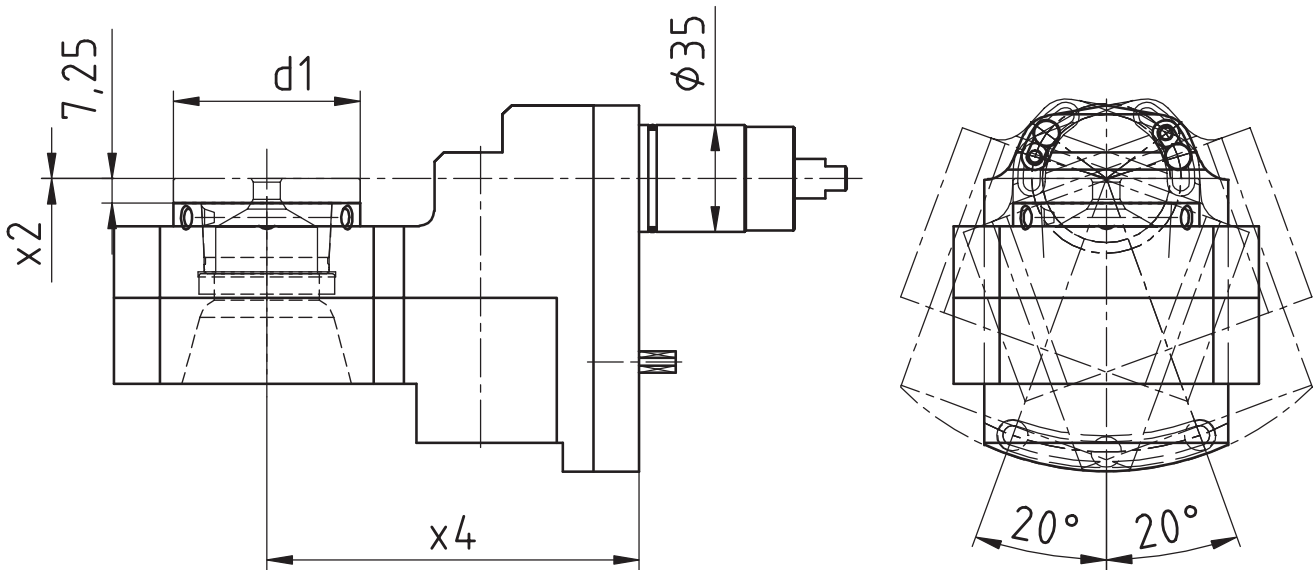
Passend für Maschine: Gamma 20  
 suitable machines:  
 approprié pour la machine:



# Tornos - Gamma

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i	p		
54	0	122	WFW 50	16	6.932	1,154:1 x			MPU.Z35.M0800.GA

<b>Passend für Maschine:</b> suitable machines: approprié pour la machine:	Gamma 20
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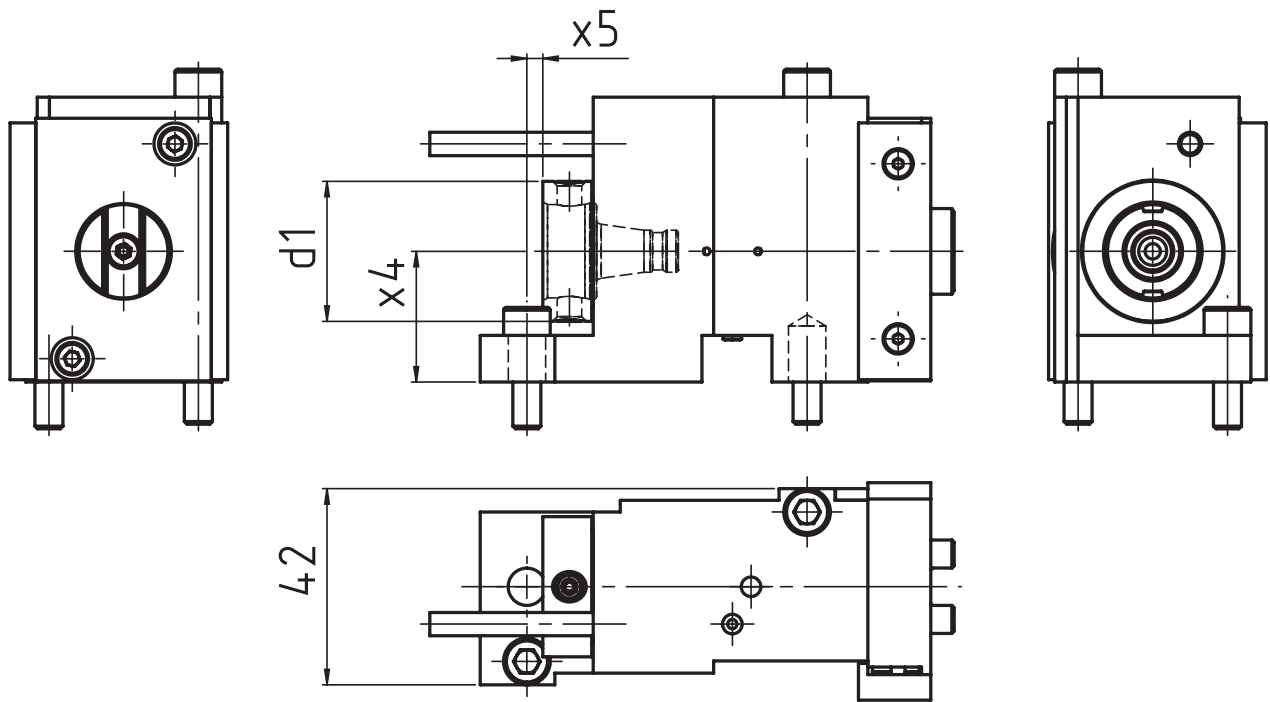
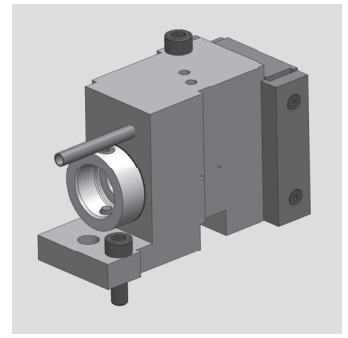
# Tornos - Swiss Baureihen

## Axial Bohr- und Fräskopf

Axial drilling and milling head

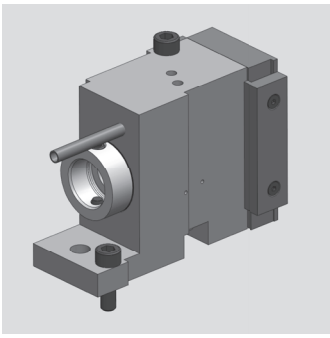
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x4	x5			i					
30	28	3,5	WFB 20-12	10	6.000	1:1	x			MPU.TO.B20.H28.DGST
30	28	3,5	WFB 20-12	10	6.000	1:1	x	x	120	MPU.TO.B20.H28.DGST.IK

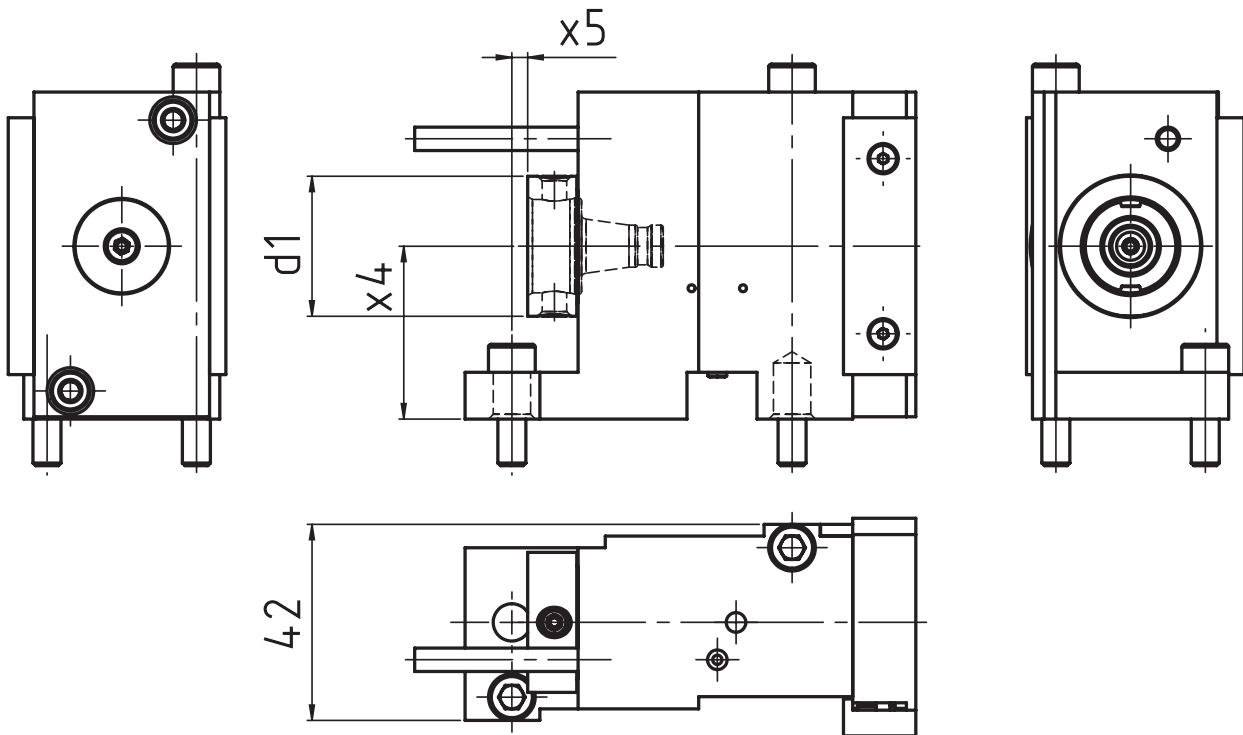
<b>Passend für Maschine:</b>	DT 13	GT 26	ST 26
suitable machines:	DT 26	GT 32	
approprié pour la machine:	GT 13	GT 32B	



# Tornos - Swiss Baureihen

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x4	x5			i					
30	37	3,4	WFB 20-12	10	6.000	1:1	x			MPU.TO.B20.H37.DGST
30	37	3,4	WFB 20-12	10	6.000	1:1	x	x	120	MPU.TO.B20.H37.DGST.IK

<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	GT 32B
approprié pour la machine:	GT 26	ST 26

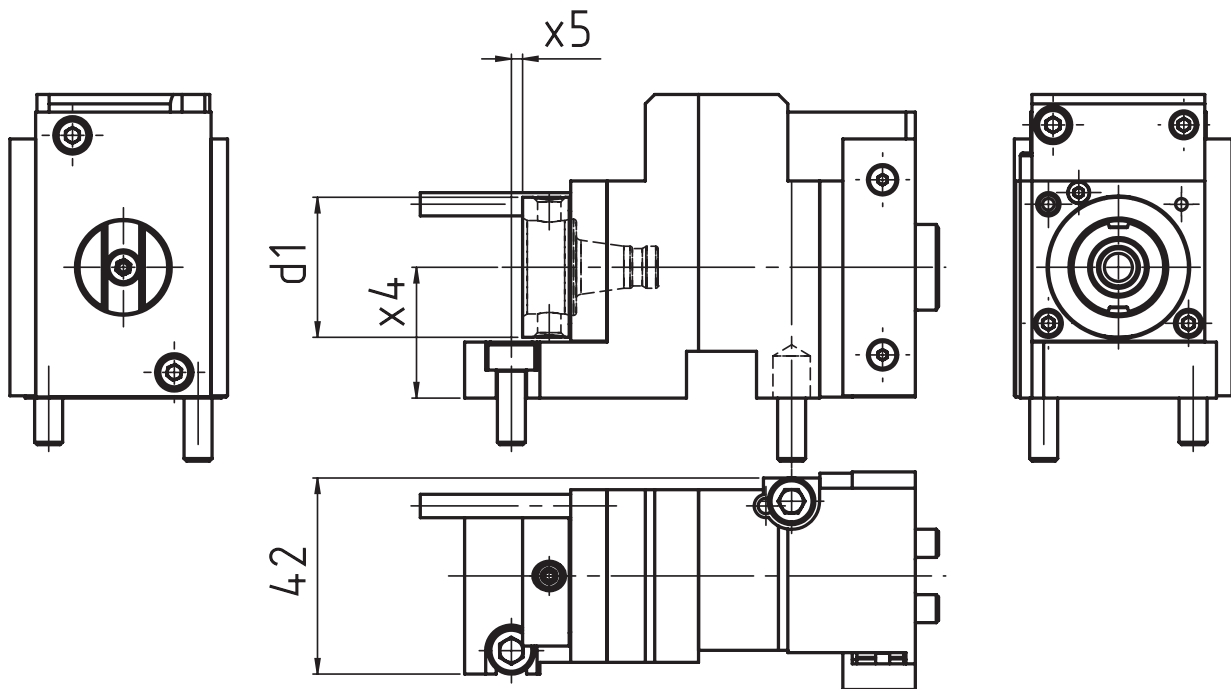
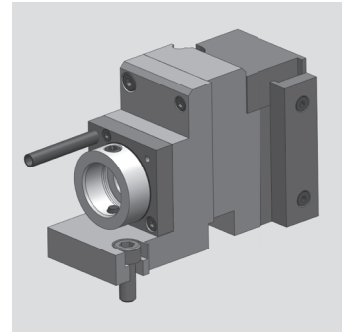
# Tornos - Swiss Baureihen

## Axial Bohr- und Fräskopf

Axial drilling and milling head

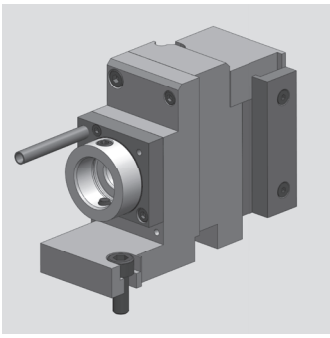
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x4	x5			i					
30	28	2,4	WFB 20-12	3	18.000	1:3	x			MPU.TO.B20.S28.DGST

<b>Passend für Maschine:</b>	DT 13	GT 26	ST 26
suitable machines:	DT 26	GT 32	
approprié pour la machine:	GT 13	GT 32B	



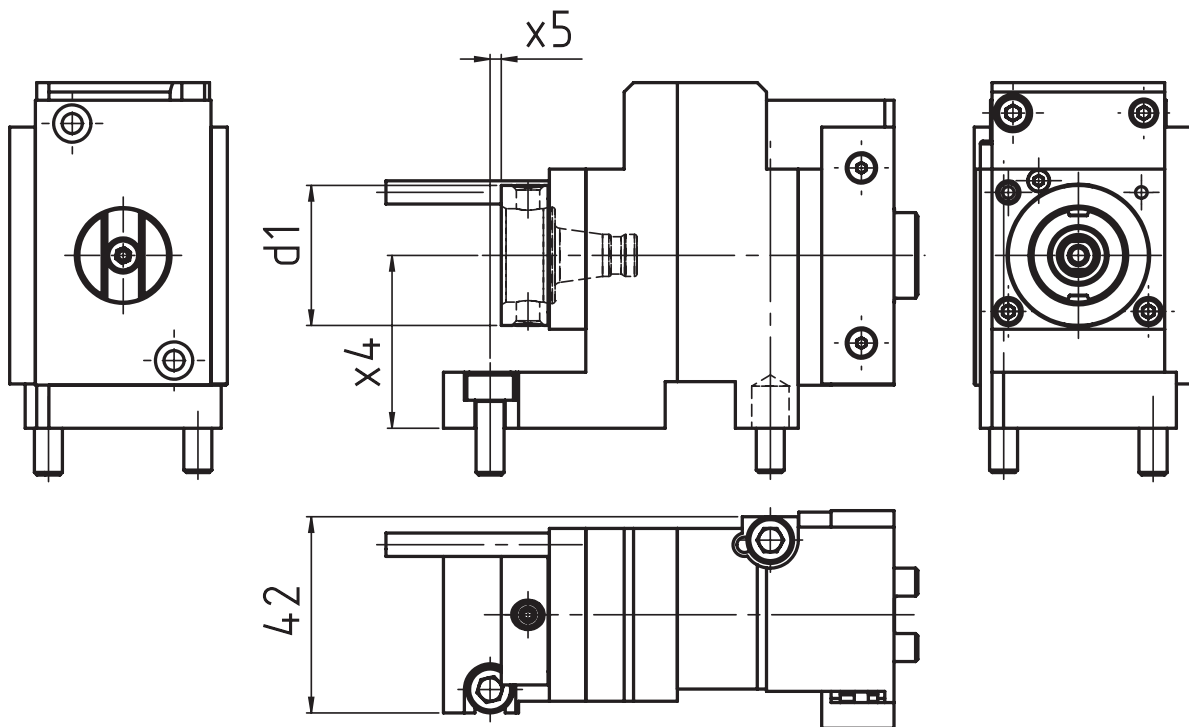
# Tornos - Swiss Baureihen

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x4	x5	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer
30	37	2,4	WFB 20-12	3 Nm	18.000	1:3	x		MPU.TO.B20.S37.DGST

<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	



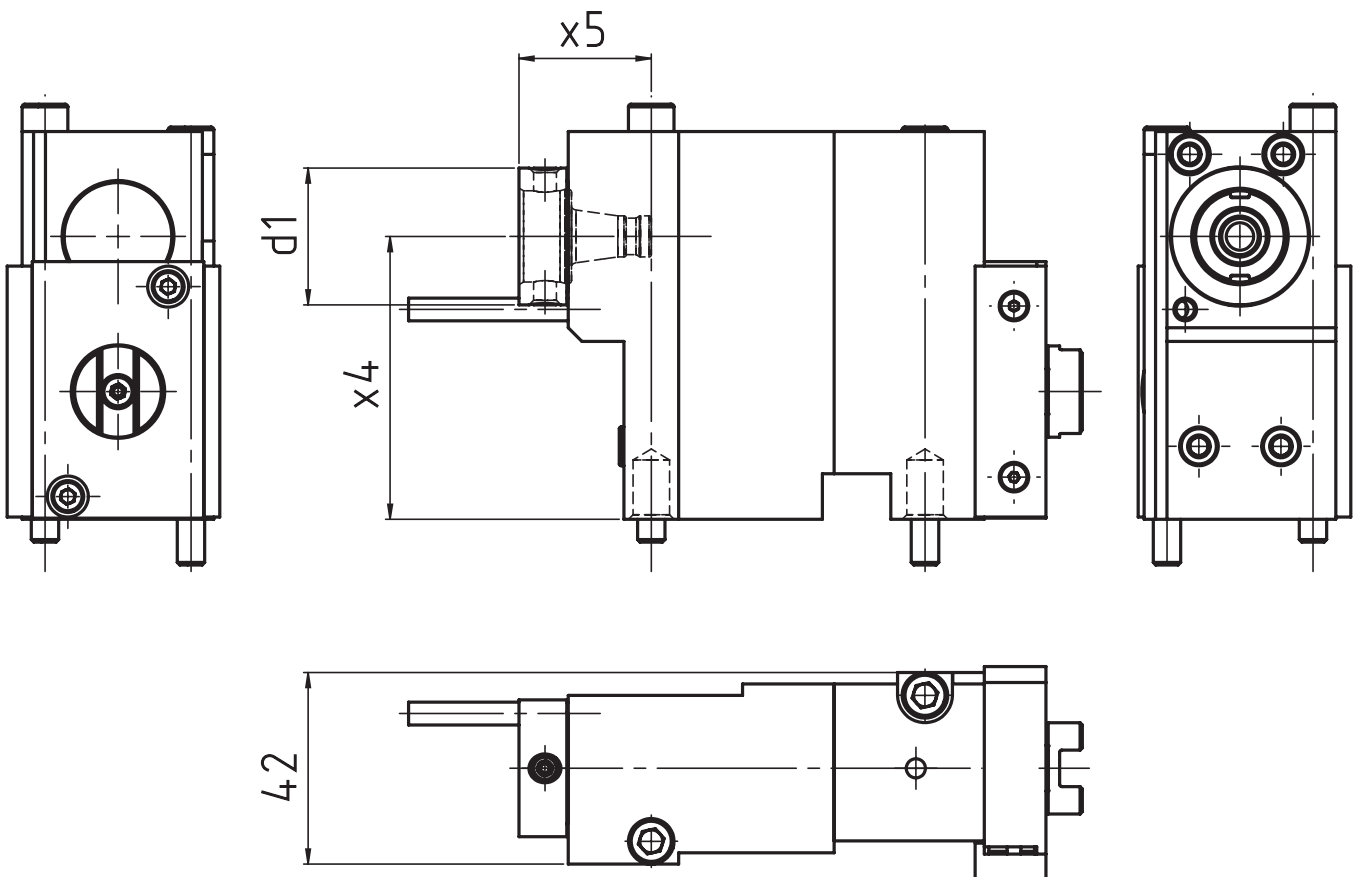
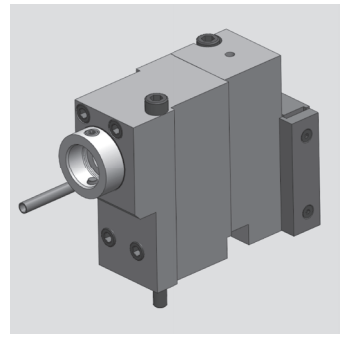
# Tornos - Swiss Baureihen

## Axial Bohr- und Fräskopf

Axial drilling and milling head

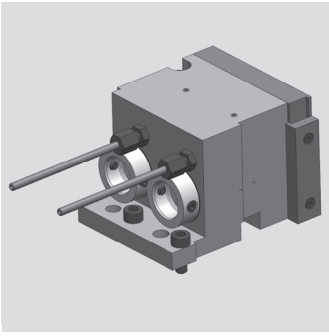
Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x4	x5			i					
30	62	29	WFB 20-12	20	3.000	2:1	x			MPU.TO.B20.H62.DGST

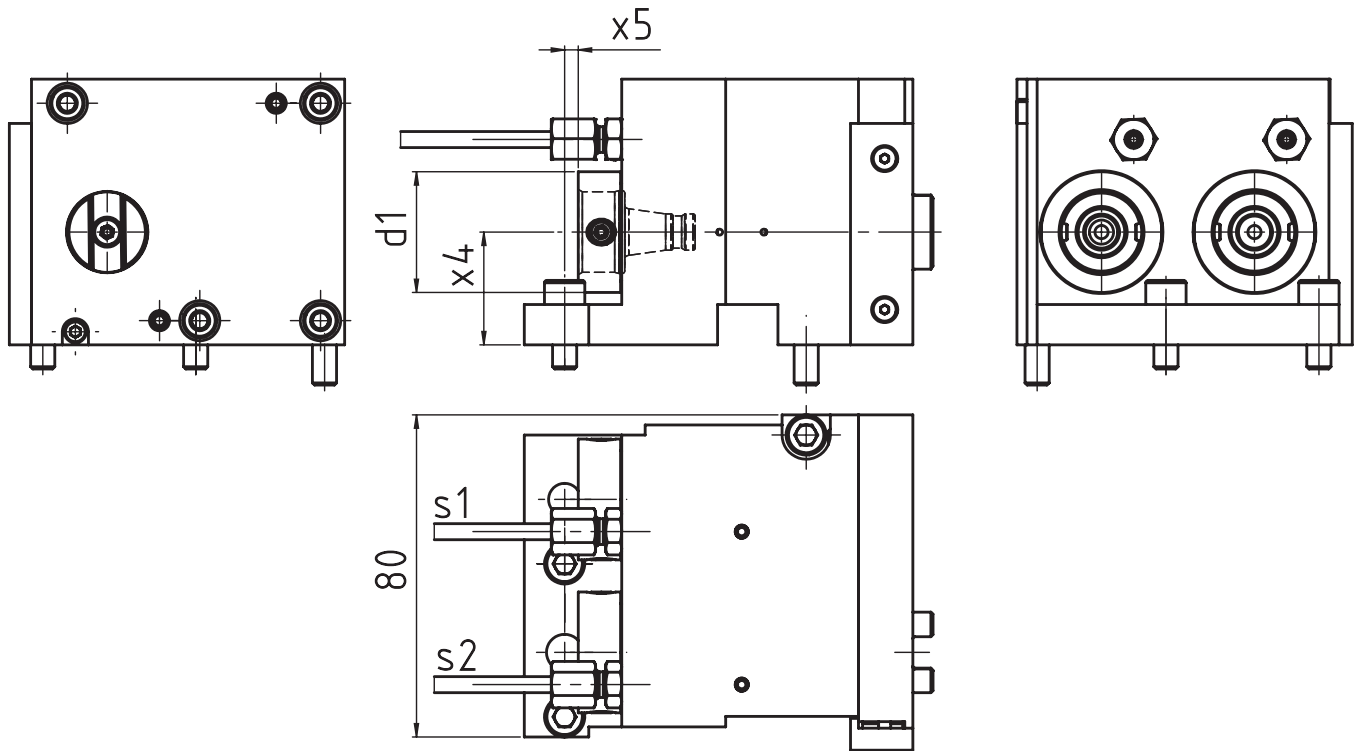
<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	



# Tornos - Swiss Baureihen

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x4	x5	WFB 20-12	10*	6.000*	1:1*	x	x	120	MPU.TO.B20.ME0.DGST

<b>Passend für Maschine:</b>	DT 13	GT 26	ST 26
suitable machines:	DT 26	GT 32	
approprié pour la machine:	GT 13	GT 32B	

\* S1: 10 Nm/6.000 rpm/i=1:1  
 S2: 3 Nm/18.000 rpm/i=1:3

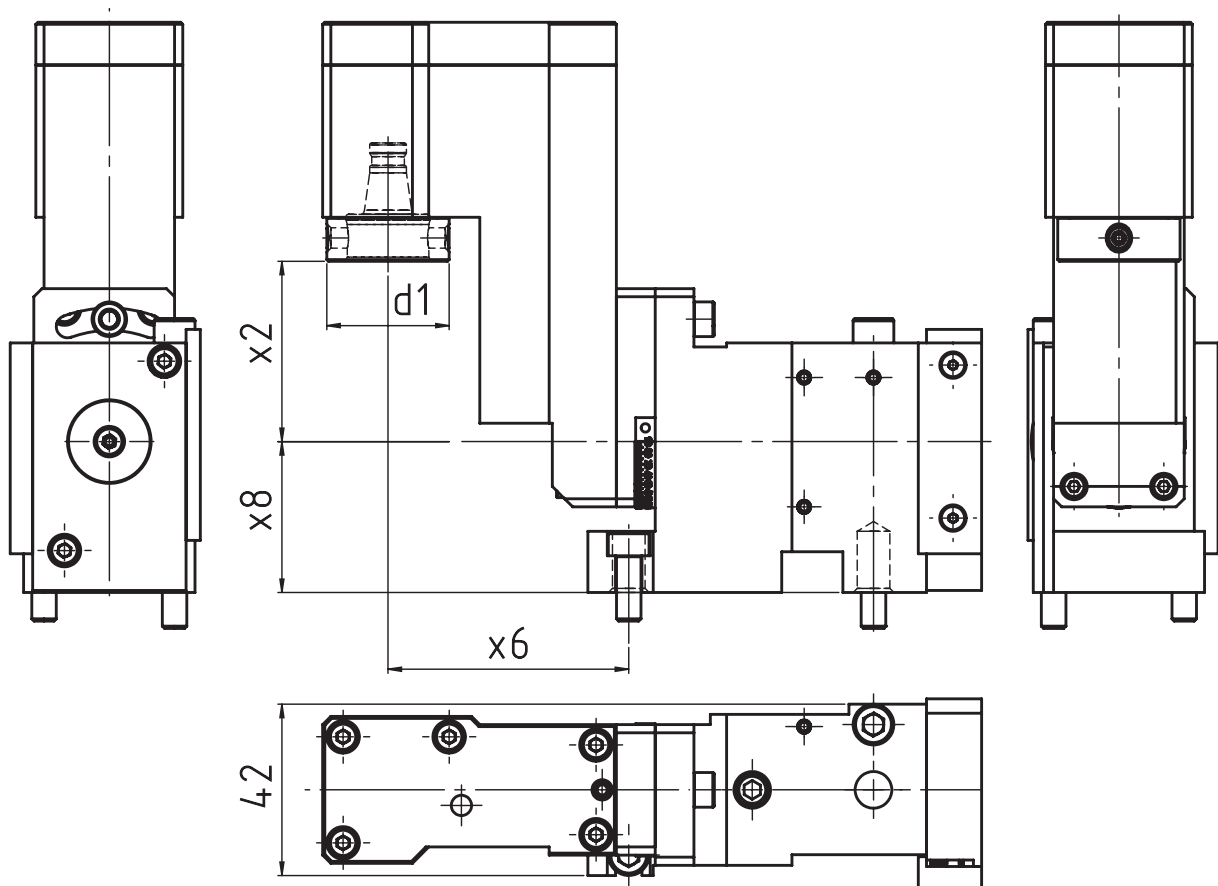
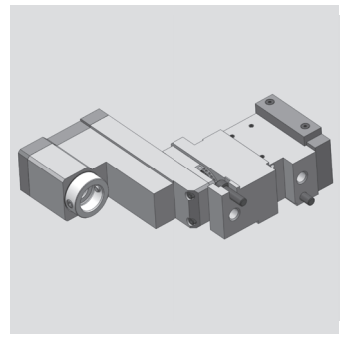
# Tornos - Swiss Baureihen

## Radial Bohr- und Fräskopf

Radial drilling and milling head

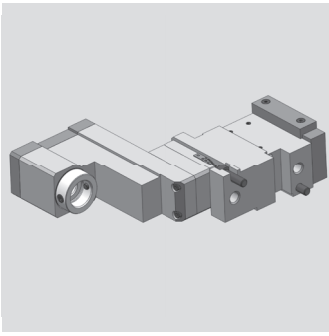
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x6	x8		T max	n max	i			p	
30	44,2	59	37	WFB 20-12	3	6.000	1:1				MPU.TO.B20.S200.DGST
30	44,2	59	37	WFB 20-12	3	6.000	1:1		x	120	MPU.TO.B20.S200.DGSTIK

<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	



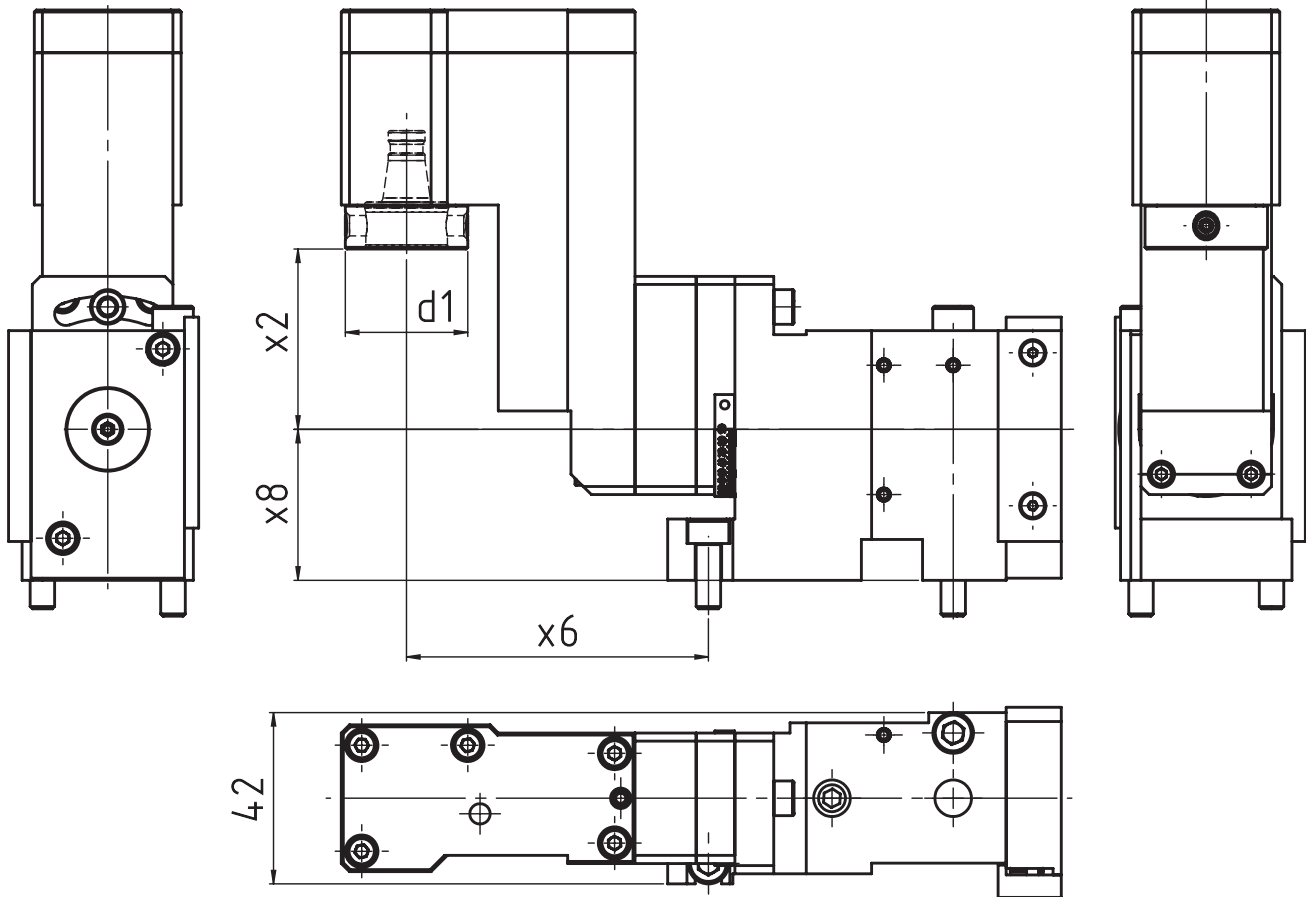
# Tornos - Swiss Baureihen

## Radial Bohr- und Fräskopf

Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x6	x8		T max	n max	i			p	
30	44,2	74	37	WFB 20-12	3	6.000	1:1				MPU.TO.B20.S210.DGST

<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	

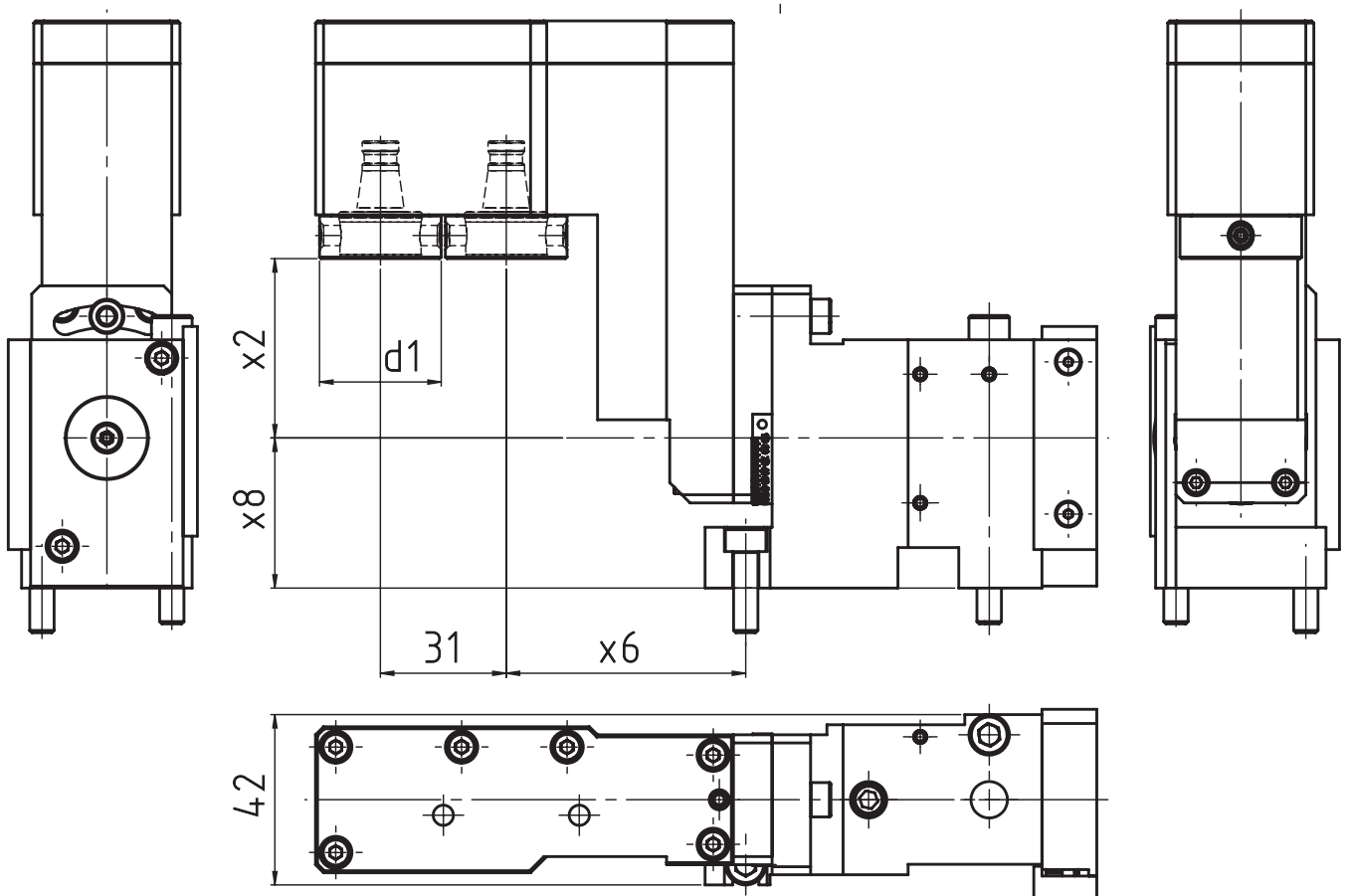
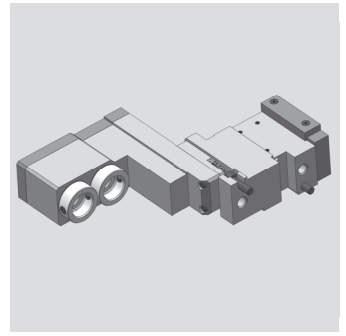
# Tornos - Swiss Baureihen

## Radial Bohr- und Fräskopf

Radial drilling and milling head

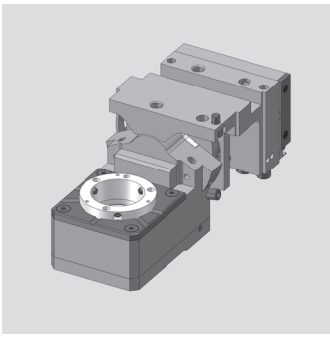
Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x6	x8	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
30	44,2	49	37	WFB 20-12	3	6.000	1:1				MPU.TO.B20.2M0S200DGST

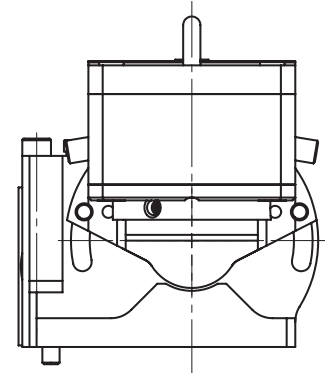
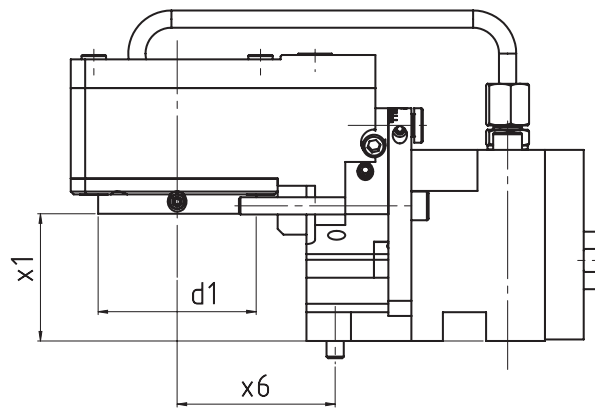
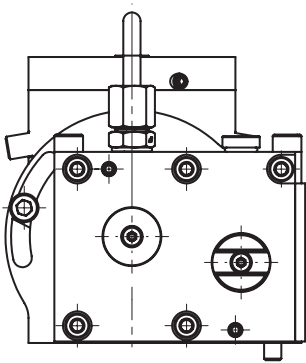
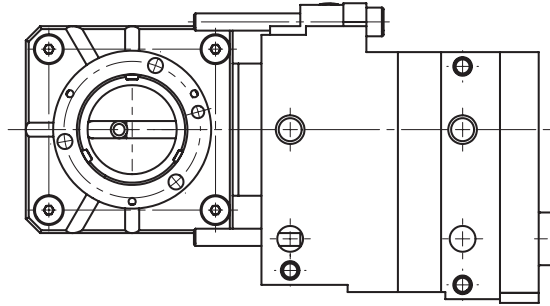
<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	



# Tornos - Swiss Baureihen

**Gewindewirbelapparat modular**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	x6			i					
55	44,25	55	WFW 50	16	3.593	1,67:1	x			MPU.TO.M0800.DGST

<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	

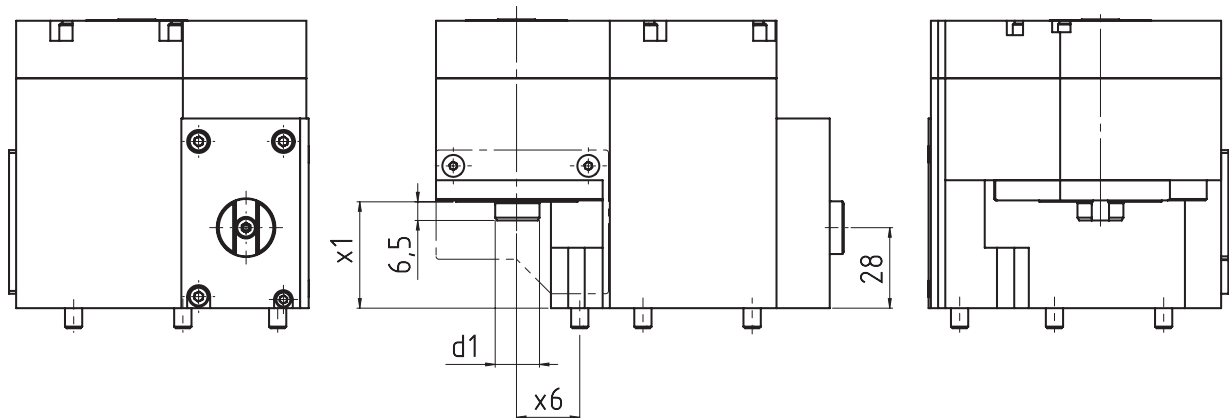
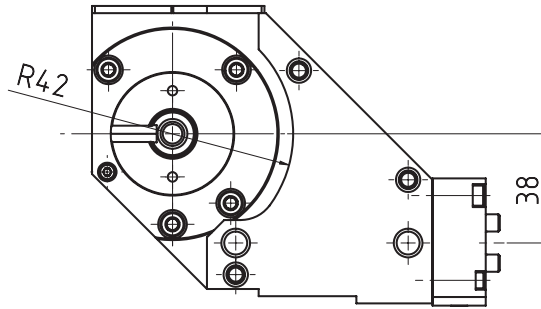
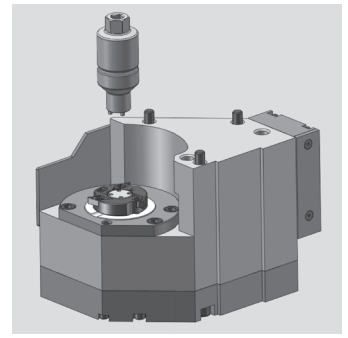
# Tornos - Swiss Baureihen

## Radial-Bohr- und Fräskopf (Mehrkantschlagen)

radial drilling and milling head (polyhedral beat)

Outil Rotatif Radial de Pertage et de Fraisage (battement polyedrique)

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm]	[rpm]	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar]	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>	<b>x6</b>		<b>T max</b>	<b>n max</b>	<b>i</b>		<b>p</b>	
30	37	22		16	3.750	1,6:1			MPU.TO.0900.DGST

<b>Passend für Maschine:</b>	DT 26	GT 32
suitable machines:	GT 13	ST 26
approprié pour la machine:	GT 26	





Modulare Aggregatetechnik

**TSUGAMI**

**WF**  
&

Werkzeugtechnik



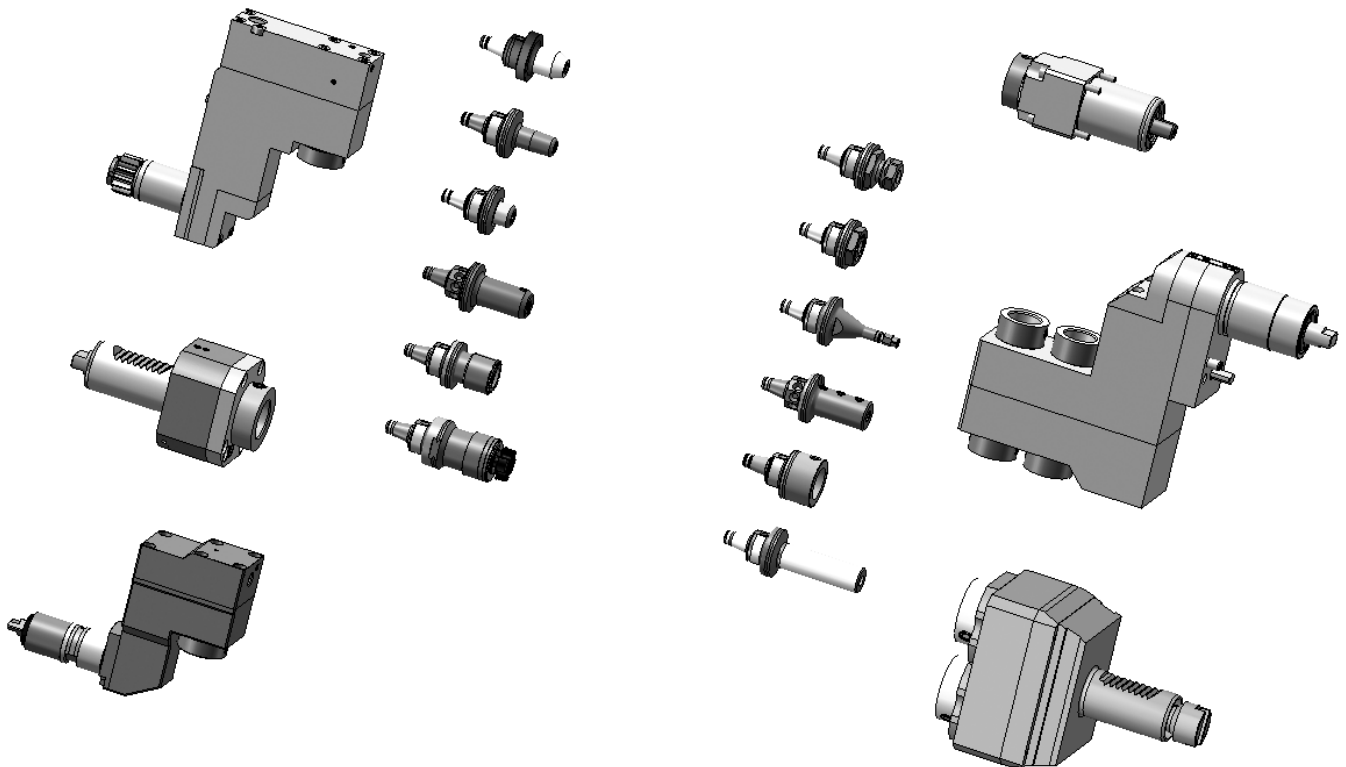
**Katalog  
TS-02**

# W&F

ph HORN ph

## WFB-Adapterpool

Indications for the customer



Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindel-drehen ein durchgängiges modulares Werkzeug-system einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.

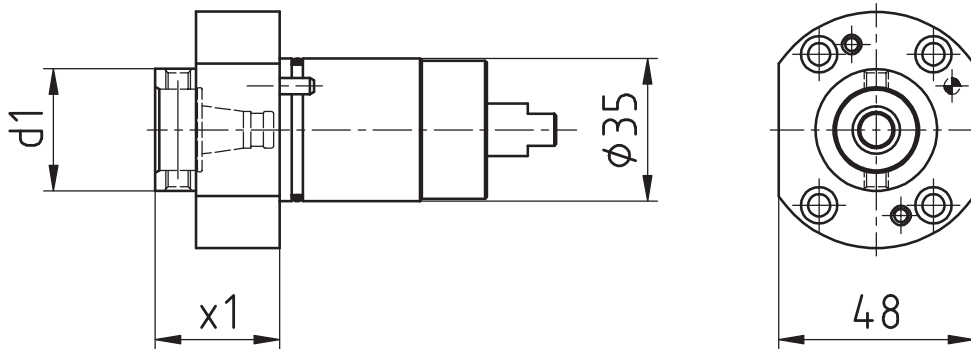
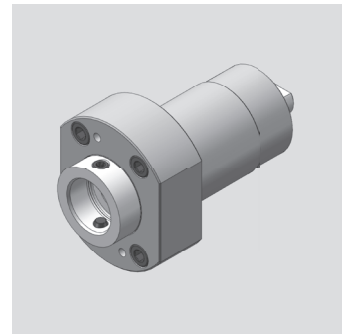
# Tsugami

## Axial Bohr- und Fräskopf

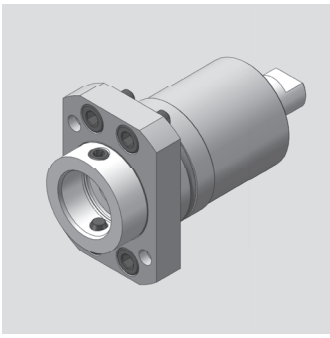
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
30	30,5	WFB 20-12	10	8.000	1:1				MPU.Z35.B20.AA0.TS



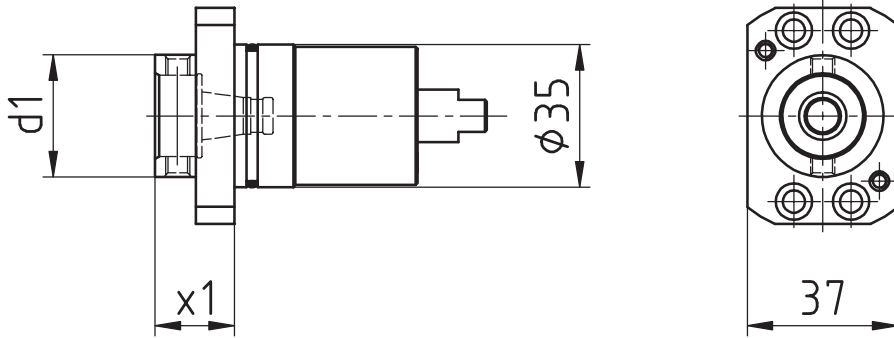
# Tsugami

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	WFB 20-12	10	8.000	1:1				MPU.Z35.B20.AA0.TSR

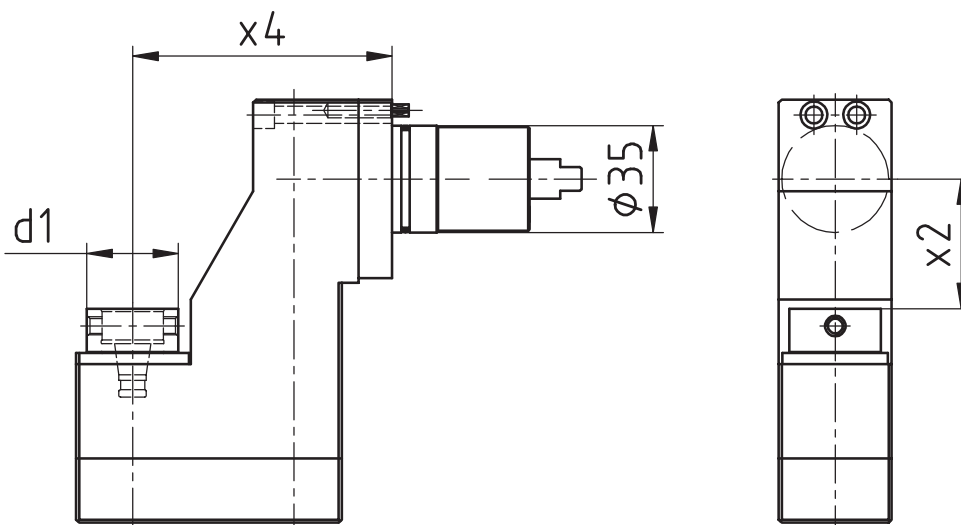
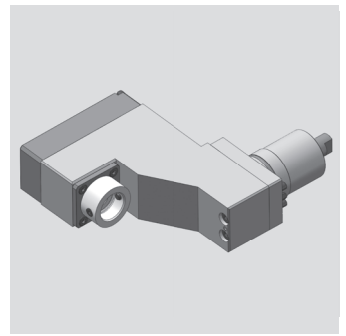
# Tsugami

## Radial Bohr- und Fräskopf

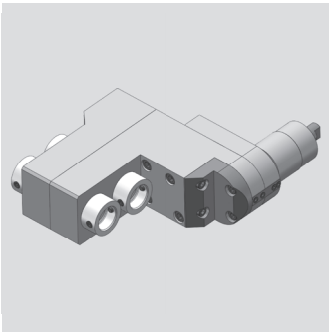
Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



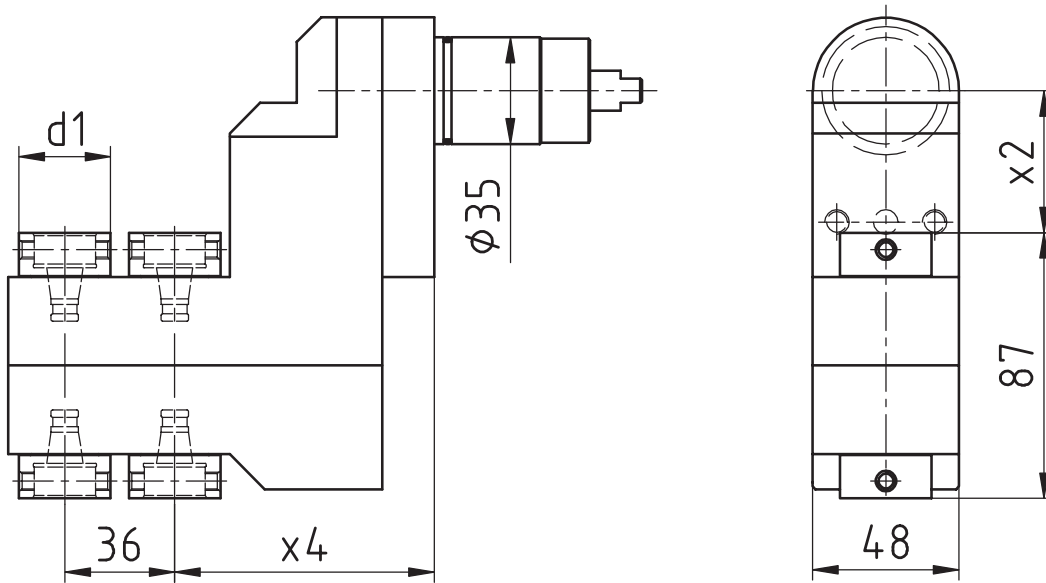
[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	10	8.000	1:1				MPU.Z35.B20.RA0.TS



# Tsugami

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x2</b>	<b>x4</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	46,5	85	WFB 20-12	3	8.000	1:1			MPU.Z35.B20.4A0.TS

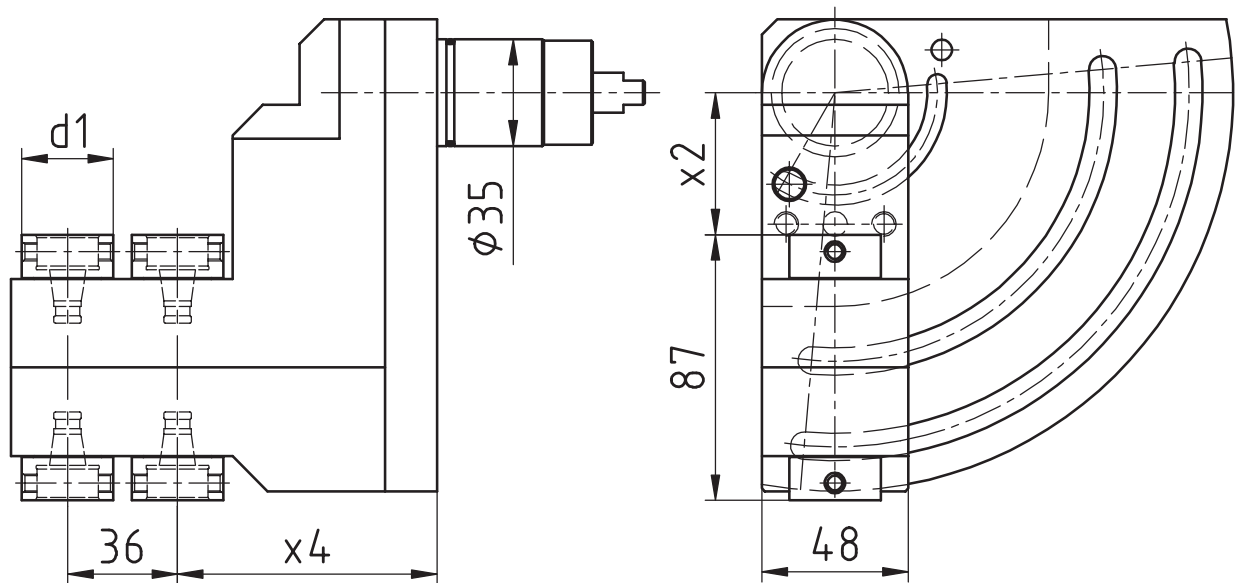
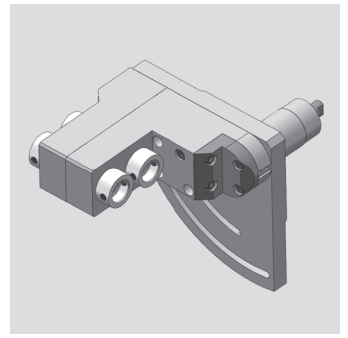
# Tsugami

## Radial Bohr- und Fräskopf

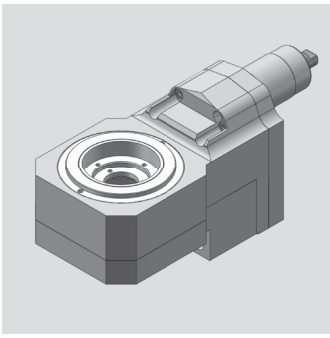
Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



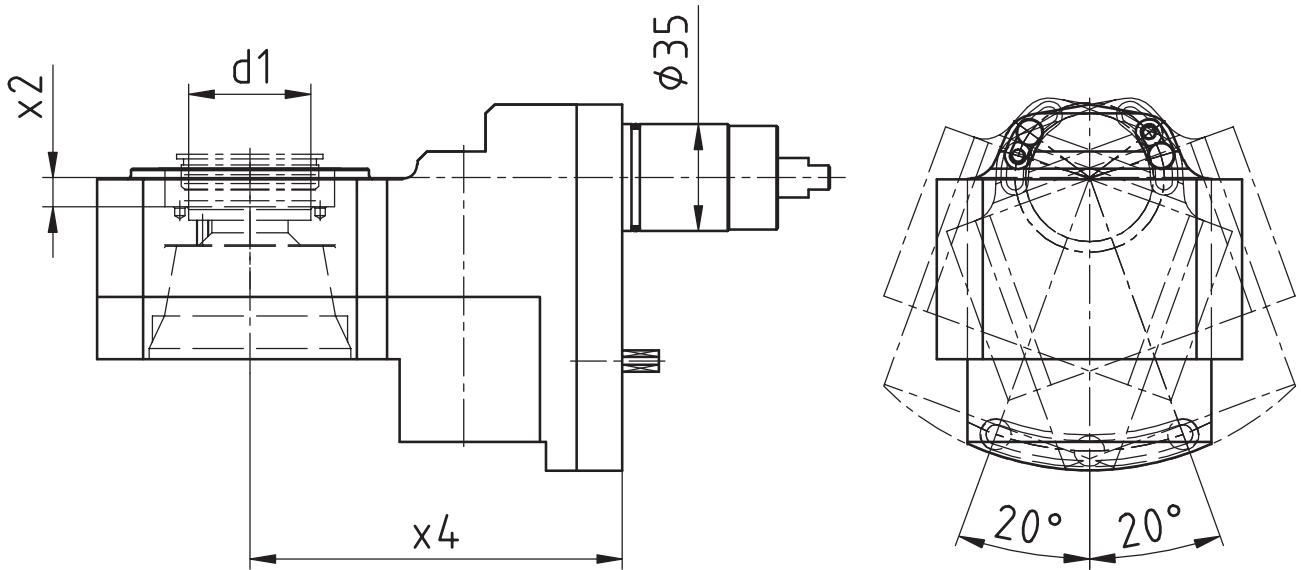
[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	3	8.000	1:1				MPU.Z35.B20.4S0.TS



# Tsugami

**Gewindewirbelapparat**  
 Thread whirling unit  
 Unité de tourbillonnement

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	x2	x4		T max	n max	i			p	
40	9,5	122	MONO	16	6.932	1,154:1	x			MPU.Z35.0800.TS



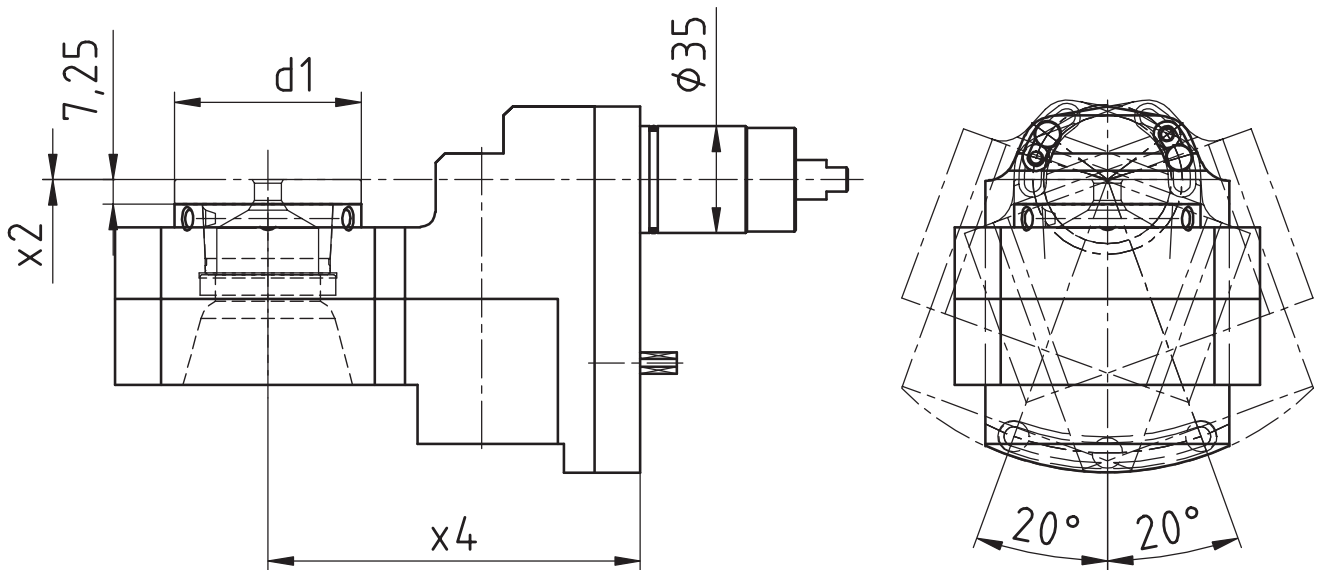
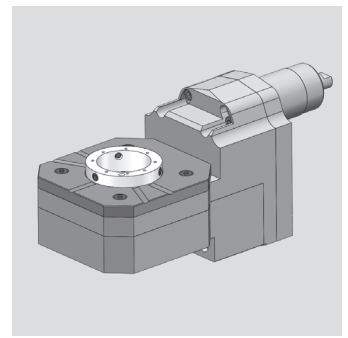
# Tsugami

## Gewindewirbelapparat modular

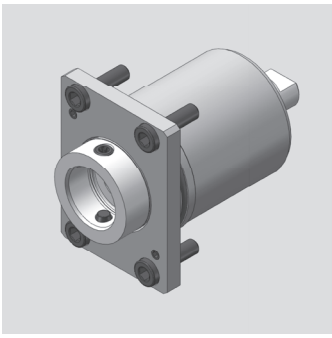
Thread whirling unit

Unité de tourbillonnement

WG 35



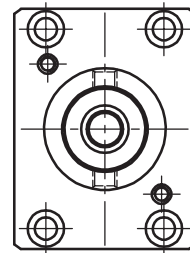
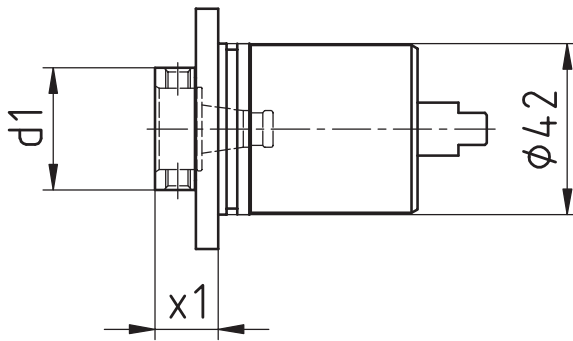
[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
d1	x2	x4	Spindel	T max	n max	i	Aussenkühlung	Innenkühlung	p	Bestellnummer
54	0	122	WFW 50	16	6.932	1,154:1 x				MPU.Z35.M0800.TS



# Tsugami

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
<b>d1</b>	<b>x1</b>								
30	15,5	WFB 20-12	10	8.000	1:1				MPU.Z42.B20.AA0.TS.R

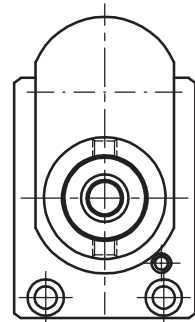
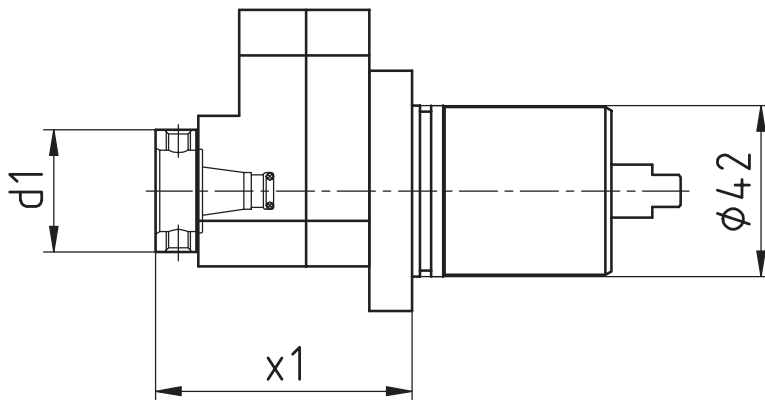
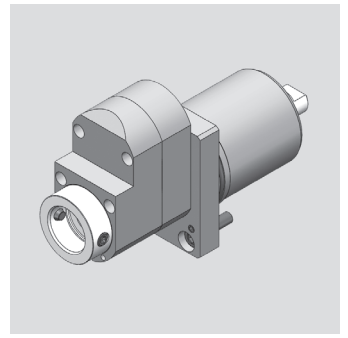
# Tsugami

## Axial Bohr- und Fräskopf

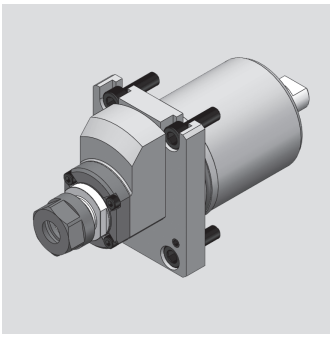
Axial drilling and milling head

Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
d1	x1								
30	63	WFB 20-12	3	24.000	1:3				MPU.Z42.B20.BA0.TS.R



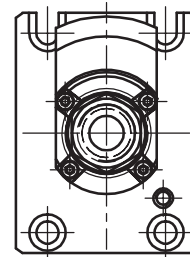
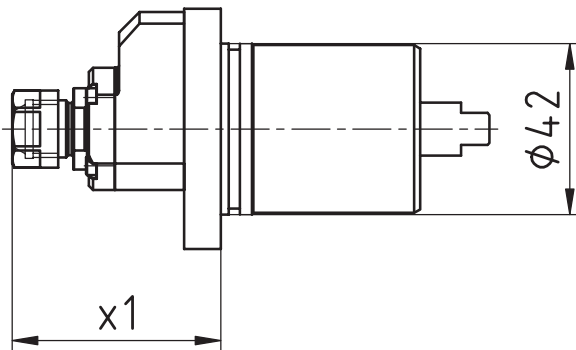
# Tsugami

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1	ER11	2	32.000	1:4				MPU.Z42.E11.BA0.TSR.I4

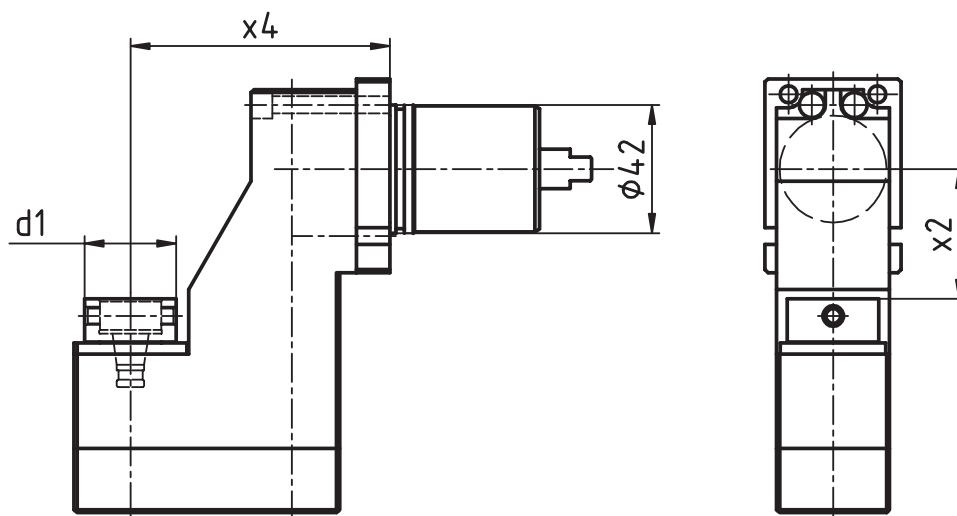
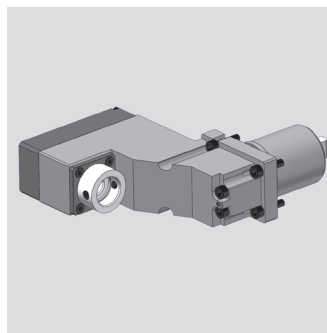
# Tsugami

## Radial Bohr- und Fräskopf

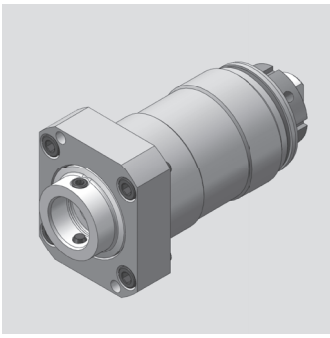
Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x2	x4	WFB 20-12	10	8.000	1:1				MPU.Z42.B20.RA0.TS



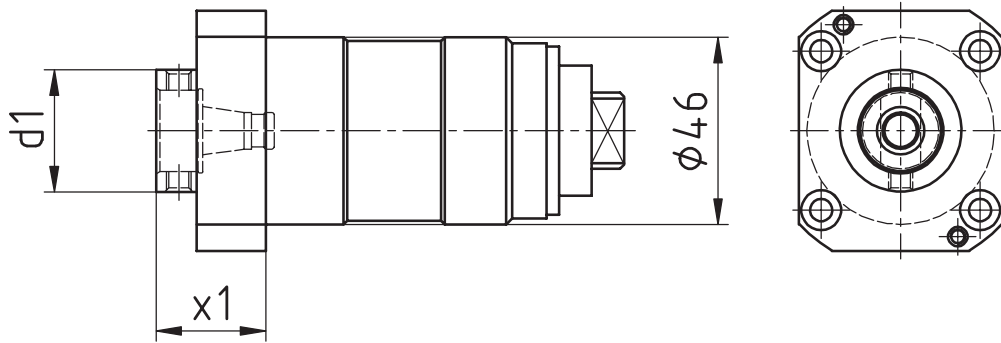
# Tsugami

## Axial Bohr- und Fräskopf

Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
30	27	WFB 20-12	10	8.000	1:1				MPU.Z46.B20.AA0.TS

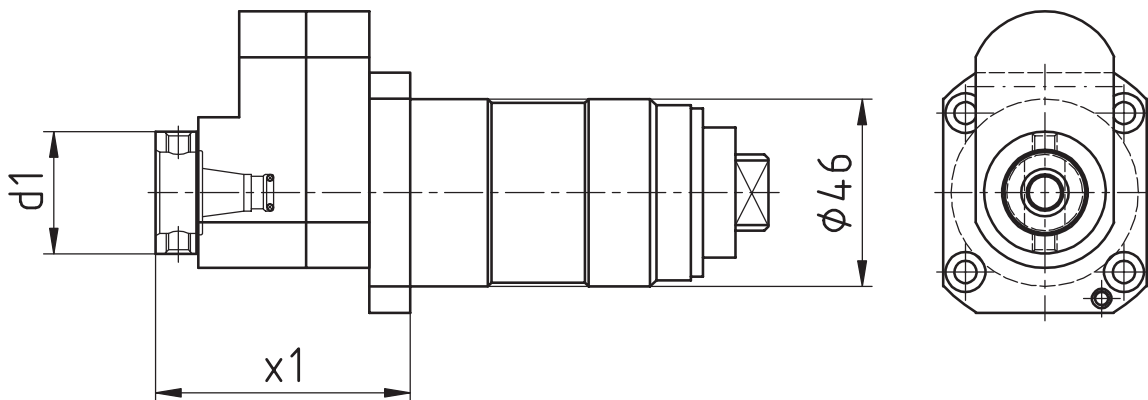
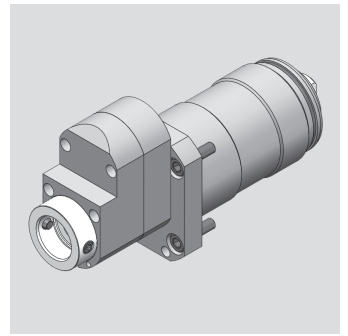
# Tsugami

## Axial Bohr- und Fräskopf

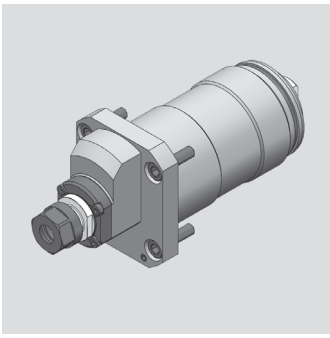
Axial drilling and milling head

Outil de perçage et de fraisage axiale

WG 35



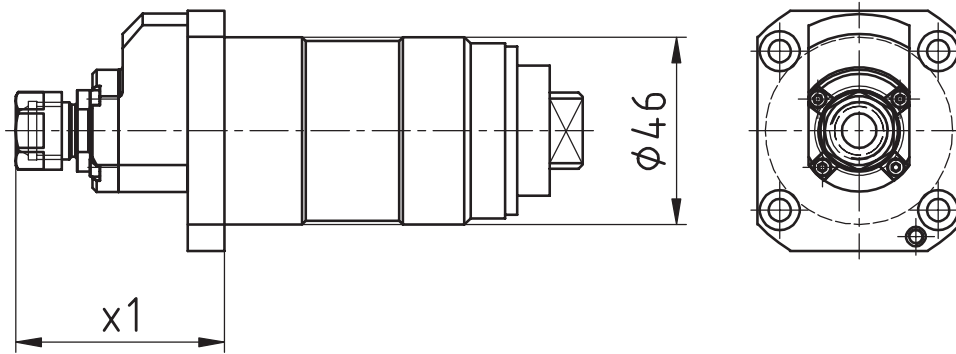
[mm]	[mm]	Spindle Broche <b>Spindel</b>	[Nm] <b>T max</b>	[rpm] <b>n max</b>	<b>i</b>	Outside cooling Lubrificat. ext. <b>Aussenkühlung</b>	Internal cooling Lubrificat. cent. <b>Innenkühlung</b>	[bar] <b>p</b>	Order no. N° de Code <b>Bestellnummer</b>
30	62,5	WFB 20-12	3	24.000	1:3				MPU.Z46.B20.BA0.TS



# Tsugami

**Axial Bohr- und Fräskopf**  
 Axial drilling and milling head  
 Outil de perçage et de fraisage axiale

**WG 35**



[mm]	[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
d1	x1								
19	51,2	ER11	2	32.000	1:4				MPU.Z46.E11.BA0.TS.I4



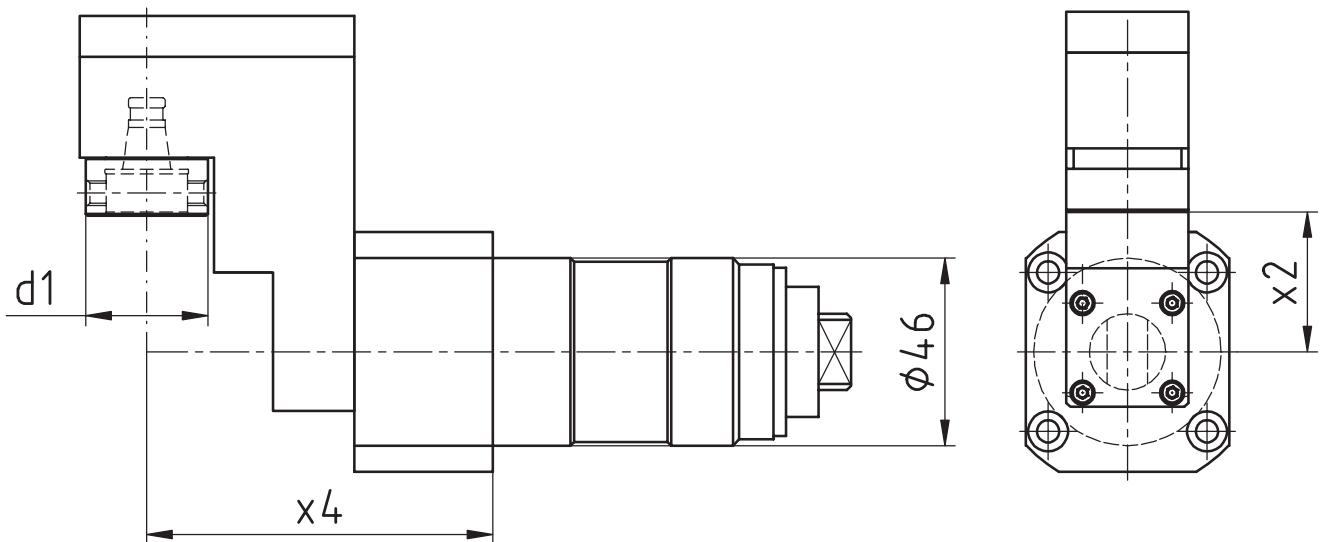
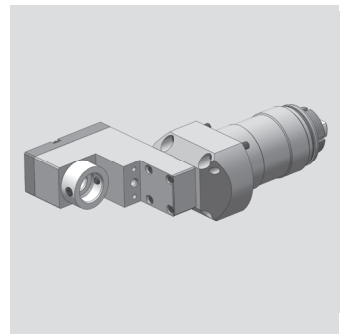
# Tsugami

## Radial Bohr- und Fräskopf

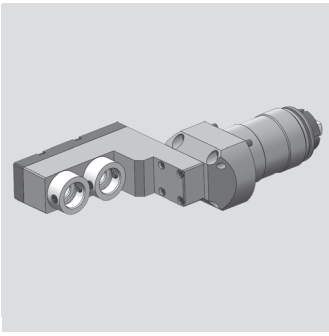
Radial drilling and milling head

Outil de perçage et de fraisage radiale

WG 35



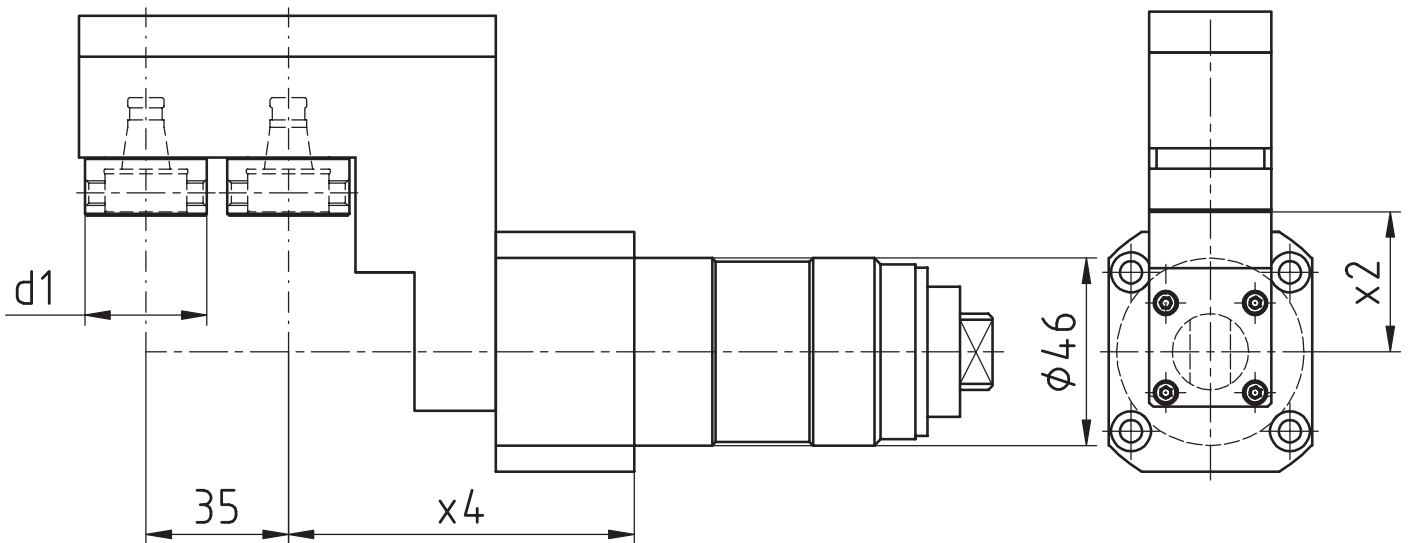
[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x2</b>	<b>x4</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	34,4	85	WFB 20-12	10	8.000	1:1				MPU.Z46.B20.RA0.TS



# Tsugami

**Radial Bohr- und Fräskopf**  
 Radial drilling and milling head  
 Outil de perçage et de fraisage radiale

**WG 35**



[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>x2</b>	<b>x4</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>
30	34,4	85	WFB 20-12	10	8.000	1:1			MPU.Z46.B20.2A0.TS

Modulare Aggregatetechnik

# Statische Halter



Werkzeugtechnik



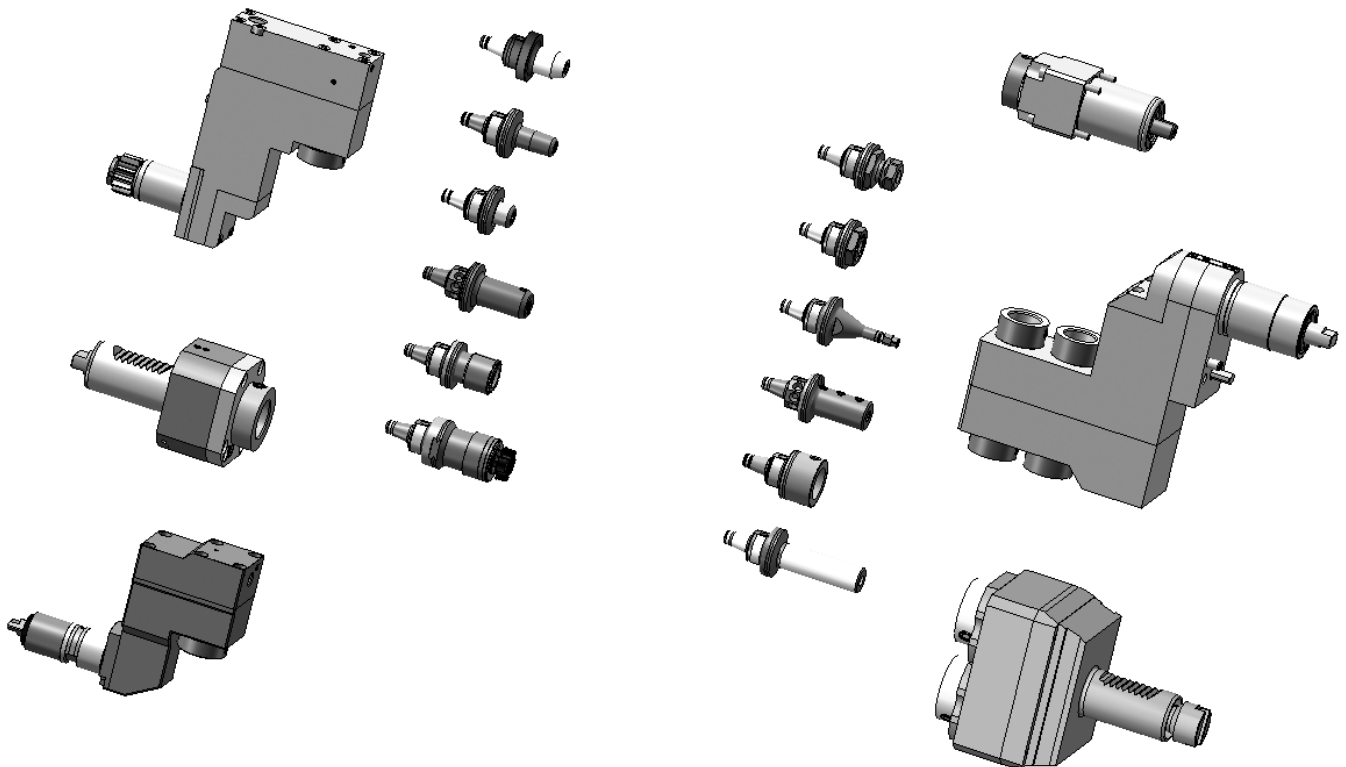
**Katalog  
WF-02**

# W&F

ph HORN ph

## WFB-Adapterpool

Indications for the customer



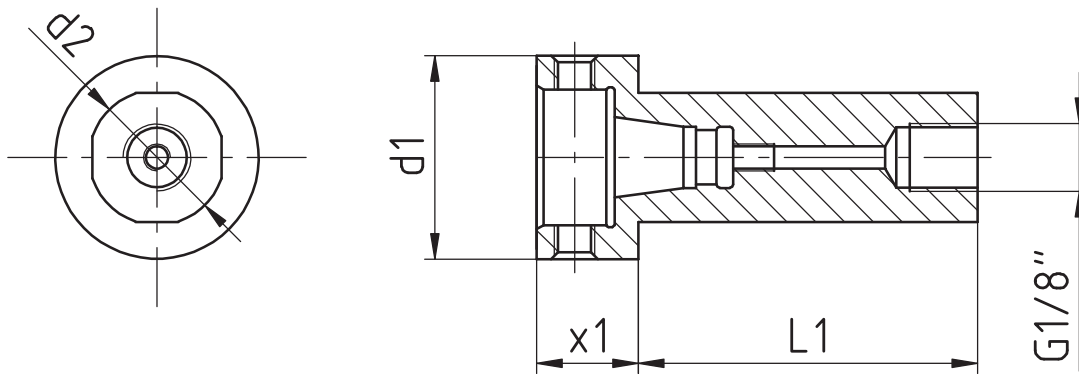
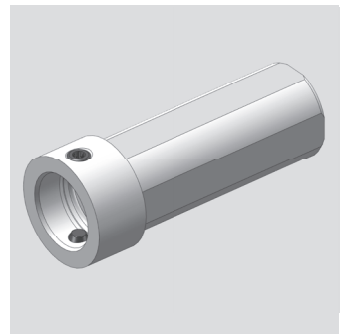
Mit den Werkzeughaltern von W&F in statischer oder angetriebener Ausführung und dem WFB-Adaptersystem haben Sie die einzigartige Möglichkeit, für sämtliche Hersteller egal ob im Kurzdrehen, Langdrehen oder Mehrspindeldrehen ein durchgängiges modulares Werkzeugsystem einzusetzen.

The W&F tool holders are in static or driven performance and beyond that, the WFB-adapter system offers you an unique option to use it for every machine manufacturer whether you are manufacturer producing with swiss type lathes, standard turning machines or multispindle turning machines, WFB is suitable.

# WFB-Grundhalter (Typ WFE)

**Modulare Rundschafthaufnahmen**  
 Round shank modular  
 Enregistrement rond modulaire

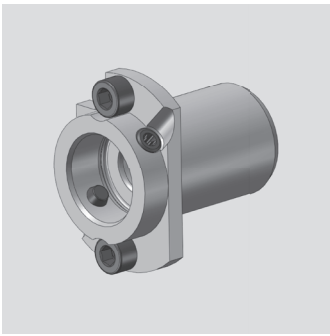
**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		shank-type Type	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>d2</b>	<b>x1</b>	<b>L1</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Schaft-Typ</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	19,05	15	60	WFB 20-12				B	x		WFE.B20.019.060
30	20	15	30	WFB 20-12				B	x		WFE.B20.020.015.030
30	20	15	50	WFB 20-12				B	x		WFE.B20.020.015.050
30	20	14,5	110	WFB 20-12				A	x		WFE.B20.020.110
30	20	15	135	WFB 20-12				A	x		WFE.B20.020.135
30	22	15	60	WFB 20-12				B	x		WFE.B20.022.060
30	25	15	60	WFB 20-12				B	x		WFE.B20.025.060
30	25	15	130	WFB 20-12				A	x		WFE.B20.025.130
30	25	15	135	WFB 20-12				A	x		WFE.B20.025.135
30	25	15	200	WFB 20-12				B	x		WFE.B20.025.200
30	25,4	15	50	WFB 20-12				B	x		WFE.B20.0254.050
33	32	13	50	WFB 20-12				B	x		WFE.B20.032.013

**Schaft-Typ**  
 shank-type  
 type

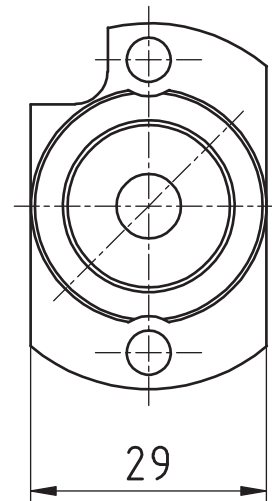
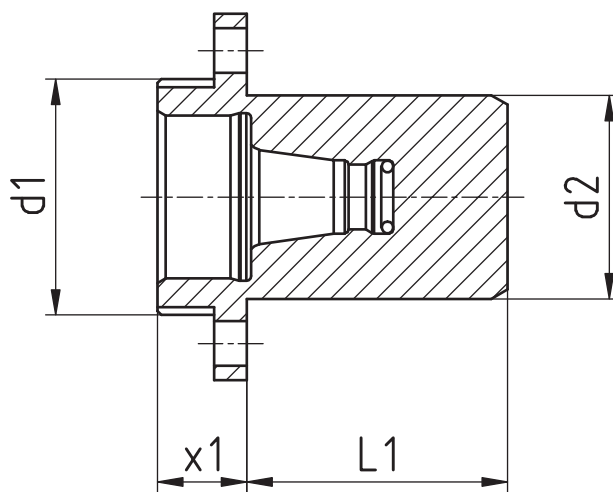
A: vollrund/full round/pleine ronde  
 B: mit Spannflächen/with clamping surfaces/avec des surfaces de serrage



# Citizen

**Modularer Basishalter**  
 modular basic holder  
 Support de base modulaire

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	d2	x1	L1		T max	n max	i			p	
29	25	11	32	WFB 20-12							WFB.020.SHT.Z25.MSC507

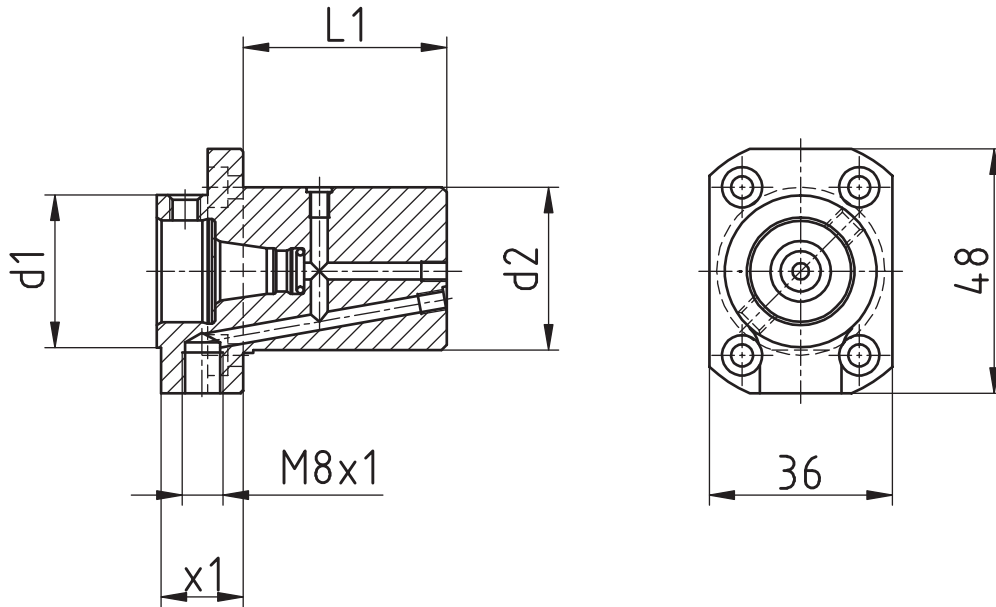
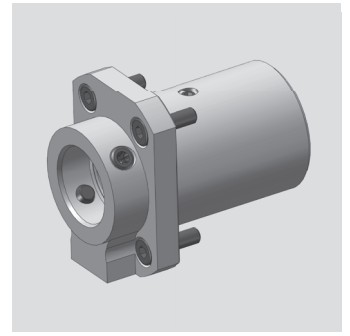
# Hanwha

## Modularer Basishalter

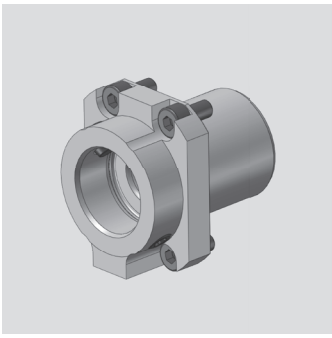
modular basic holder

Support de base modulaire

WG 35



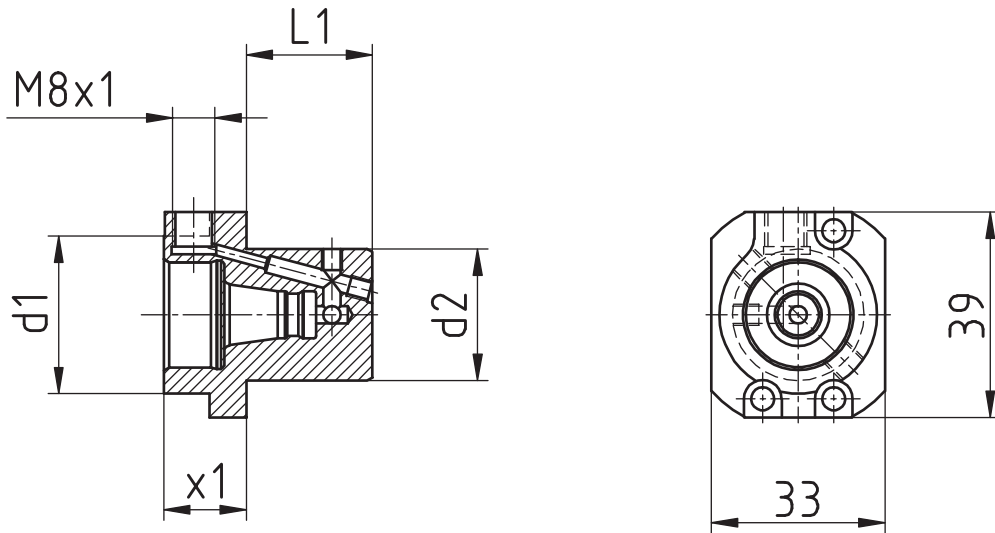
[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	d2	x1	L1		T max	n max	i			p	
30	33	16	40	WFB 20-12				x	x		WFB.020.SHT.XD20.001



# Hanwha

**Modularer Basishalter**  
 modular basic holder  
 Support de base modulaire

**WG 35**



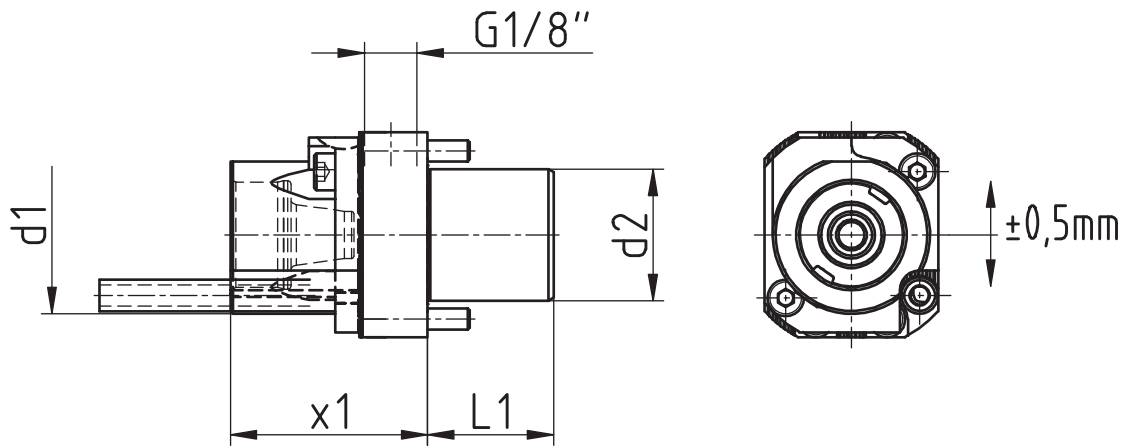
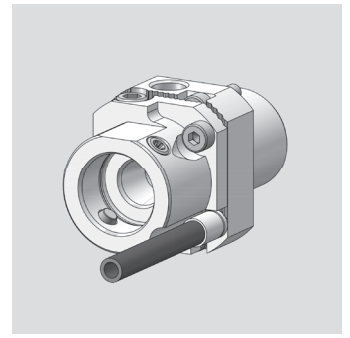
[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>d2</b>	<b>x1</b>	<b>L1</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	25	15,7	24	WFB 20-12				x	x		WFB.020.SHT.XE20.R



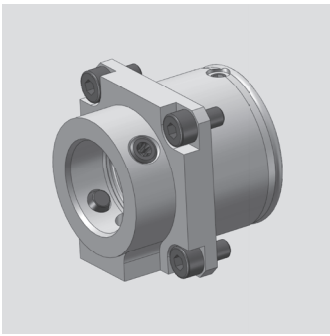
# Hanwha

**Modularer Basishalter (Y-Versatz ausgleichbar)**  
 modular basic holder (Y offset compensated)  
 Support de base modulaire (Y décalage)

**WG 35**



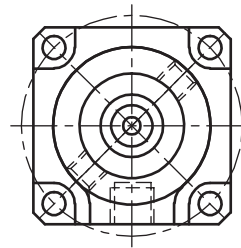
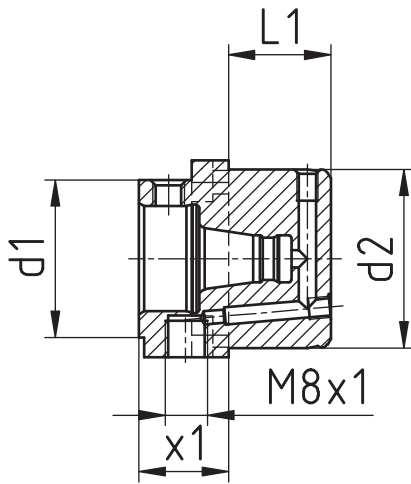
[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	d2	x1	L1		T max	n max	i			p	
30	25	15,7	24	WFB 20-12				x	x		WFB.020.SHT.XE20.RV



# Maier

**Modularer Basishalter**  
 modular basic holder  
 Support de base modulaire

**WG 35**

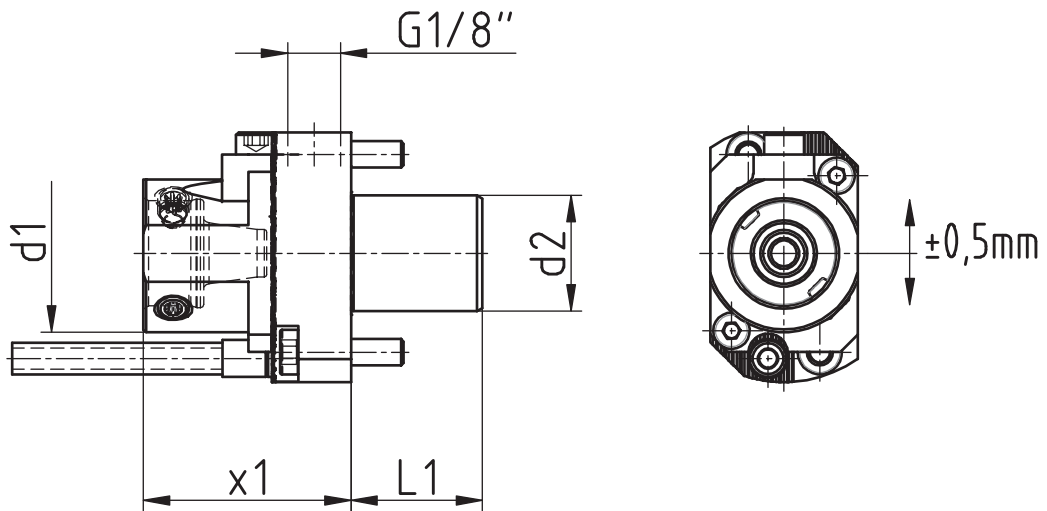
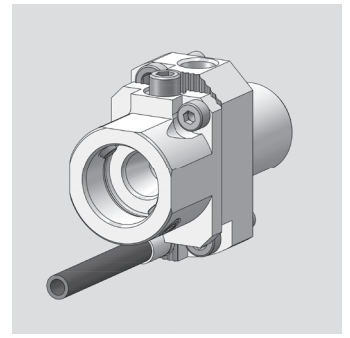


[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>d2</b>	<b>x1</b>	<b>L1</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	34	17	19,5	WFB 20-12				x	x		WFB.020.SHT.Z34.019,5

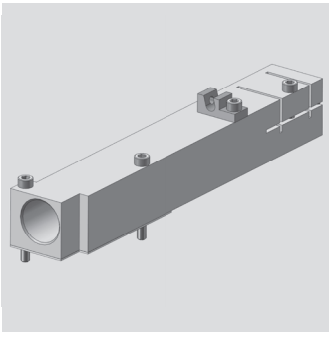
# Star

**Modularer Basishalter (Y-Versatz ausgleichbar)**  
 modular basic holder (Y offset compensated)  
 Support de base modulaire (Y décalage)

**WG 35**



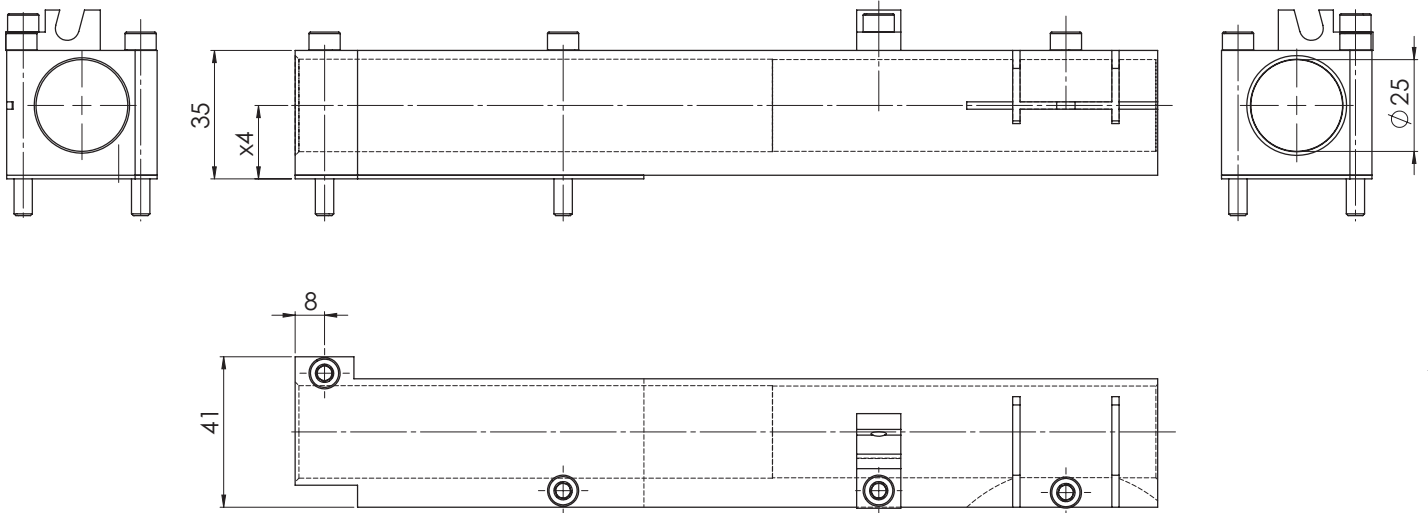
[mm]	[mm]	[mm]	[mm]	Spindle Broche Spindel	[Nm]	[rpm]		Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar]	Order no. N° de Code Bestellnummer
d1	d2	x1	L1		T max	n max	i			p	
30	22	39,5	25	WFB-20-12				x	x		WFB.020.SHT.541-61-00



# Tornos EvoDECO 10

**Basishalter**  
basic holder  
Support de base

**WG 35**

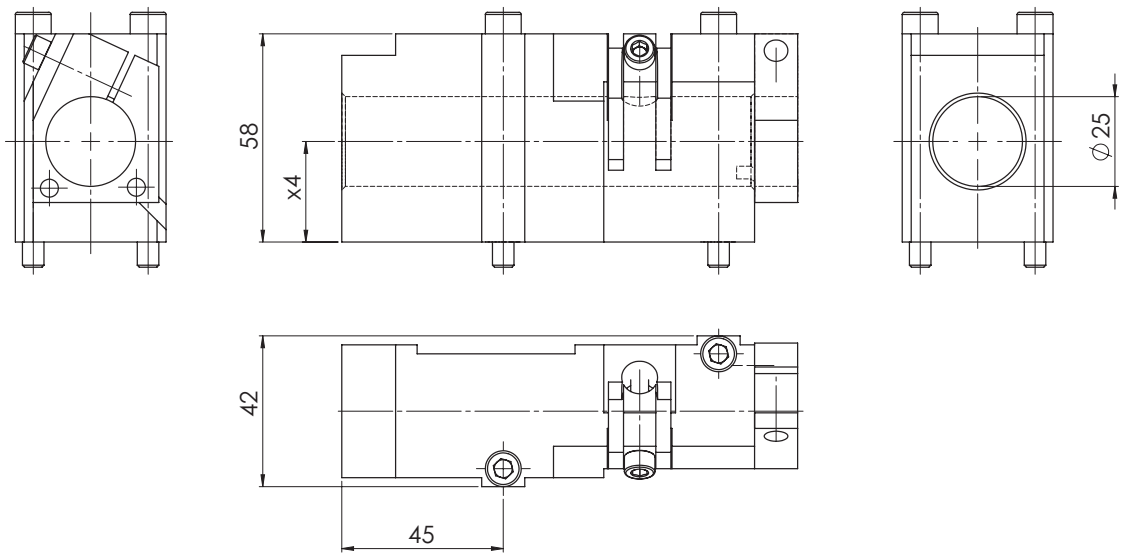
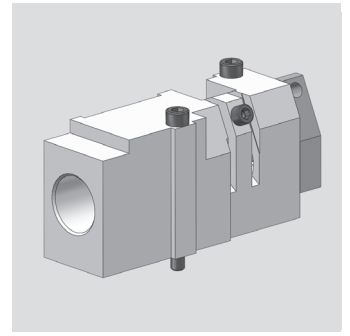


[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max	i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
x4								

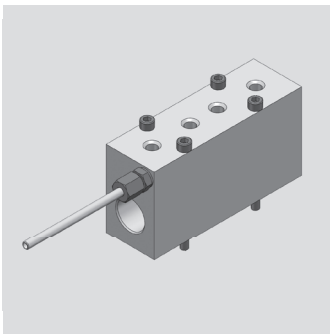
# Tornos EvoDECO 13

**Basishalter**  
basic holder  
Support de base

**WG 35**



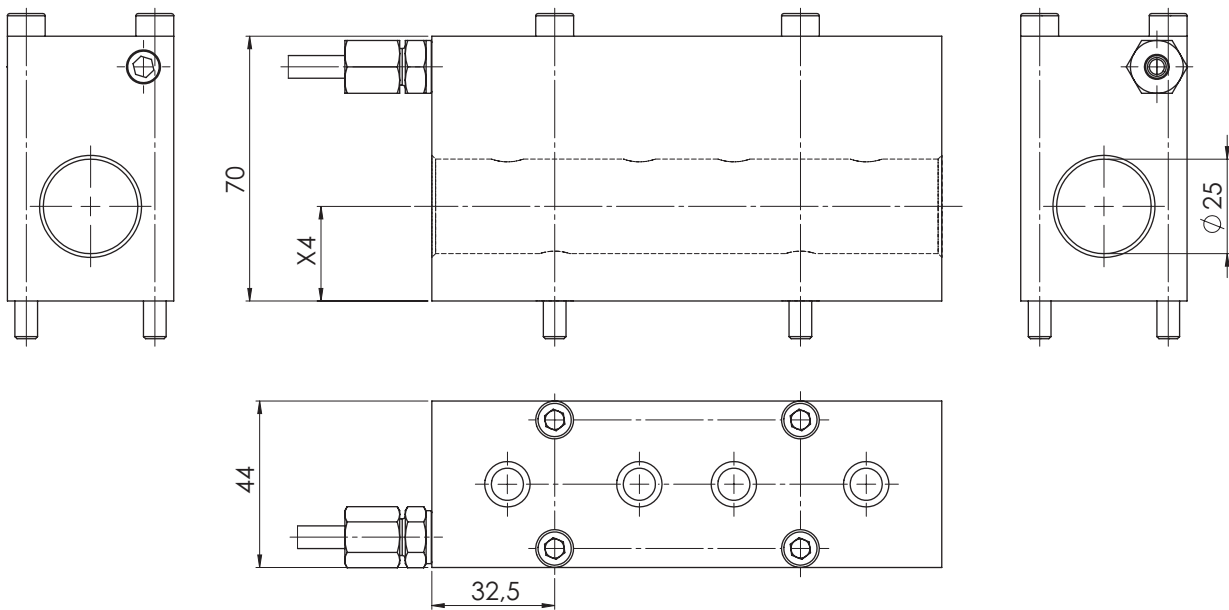
[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer



# Tornos EvoDECO 20

**Basishalter**  
basic holder  
Support de base

**WG 35**

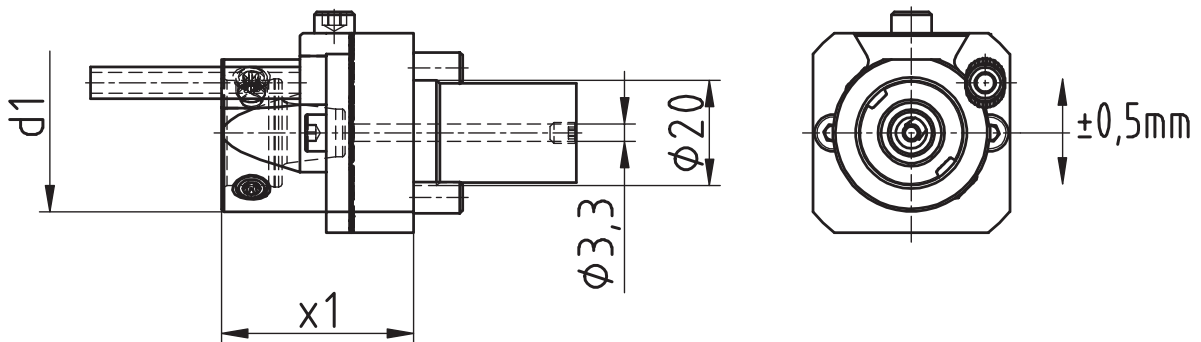
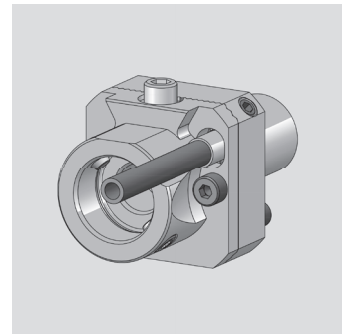


[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
x4							

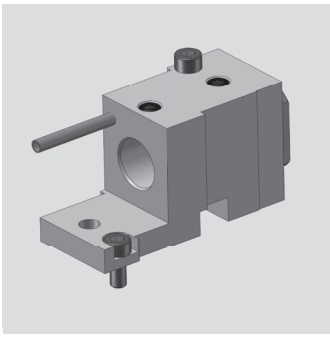
# Tornos Swiss Baureihe

**Modularer Basishalter (Y-Versatz ausgleichbar)**  
 modular basic holder (Y offset compensated)  
 Support de base modulaire (Y décalage)

**WG 35**



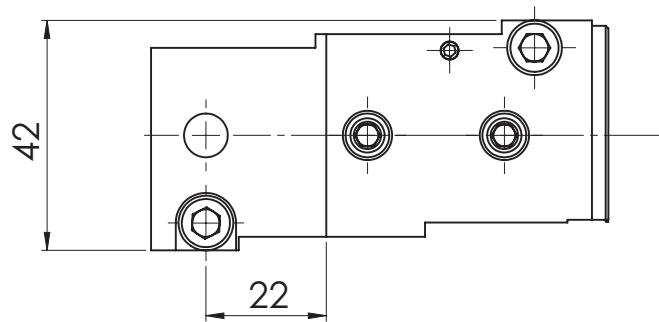
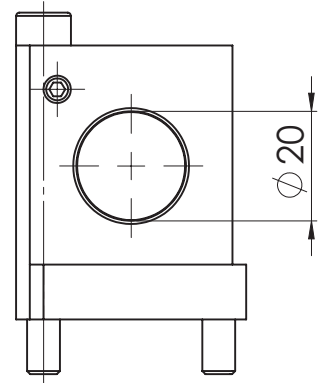
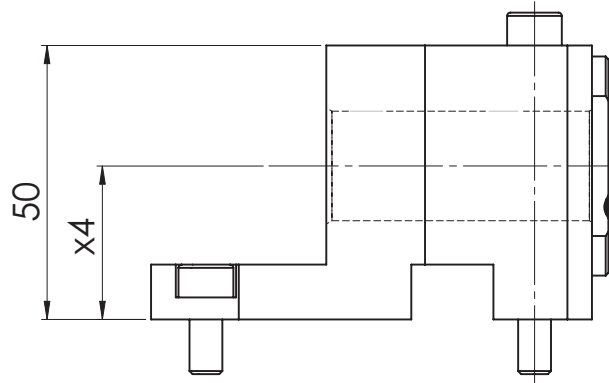
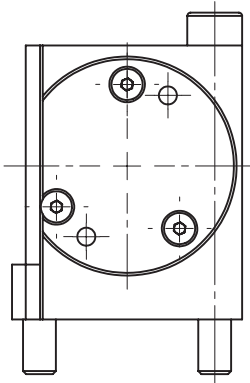
[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>d2</b>	<b>x1</b>	<b>L1</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	20	36,5	31	WFB 20-12				x	x		WFB.020.SHT.DGST.R



# Tornos Swiss Baureihe

**Modularer Basishalter**  
 modular basic holder  
 Support de base modulaire

**WG 35**



[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
x4							
28				x	x		WFE.020.H28.DGST

**Passende Rundschaftraufnahmen siehe Seite 9.1**  
 matching round shanks see page 9.1



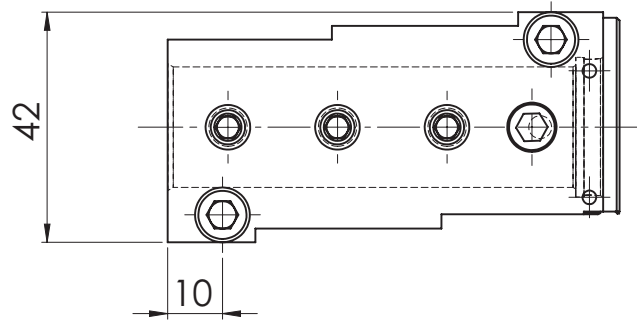
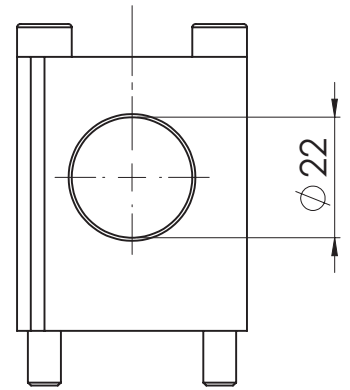
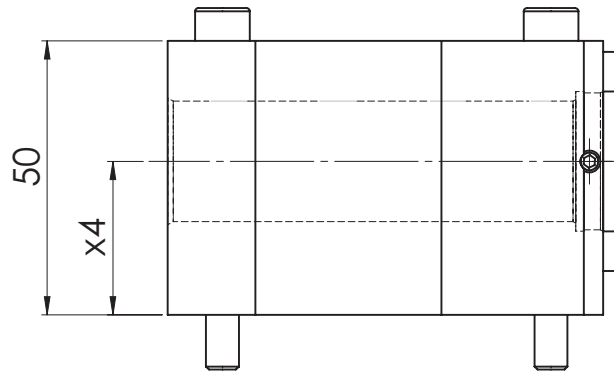
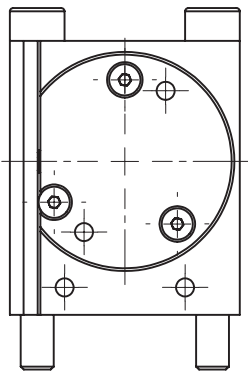
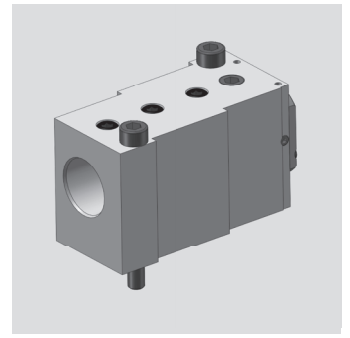
# Tornos Swiss Baureihe

## Modularer Basishalter

modular basic holder

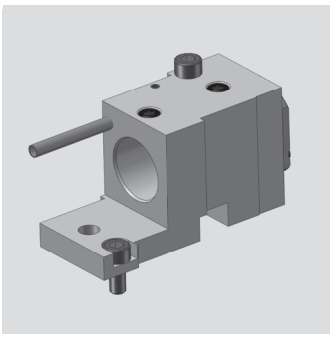
Support de base modulaire

WG 35



[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
x4							

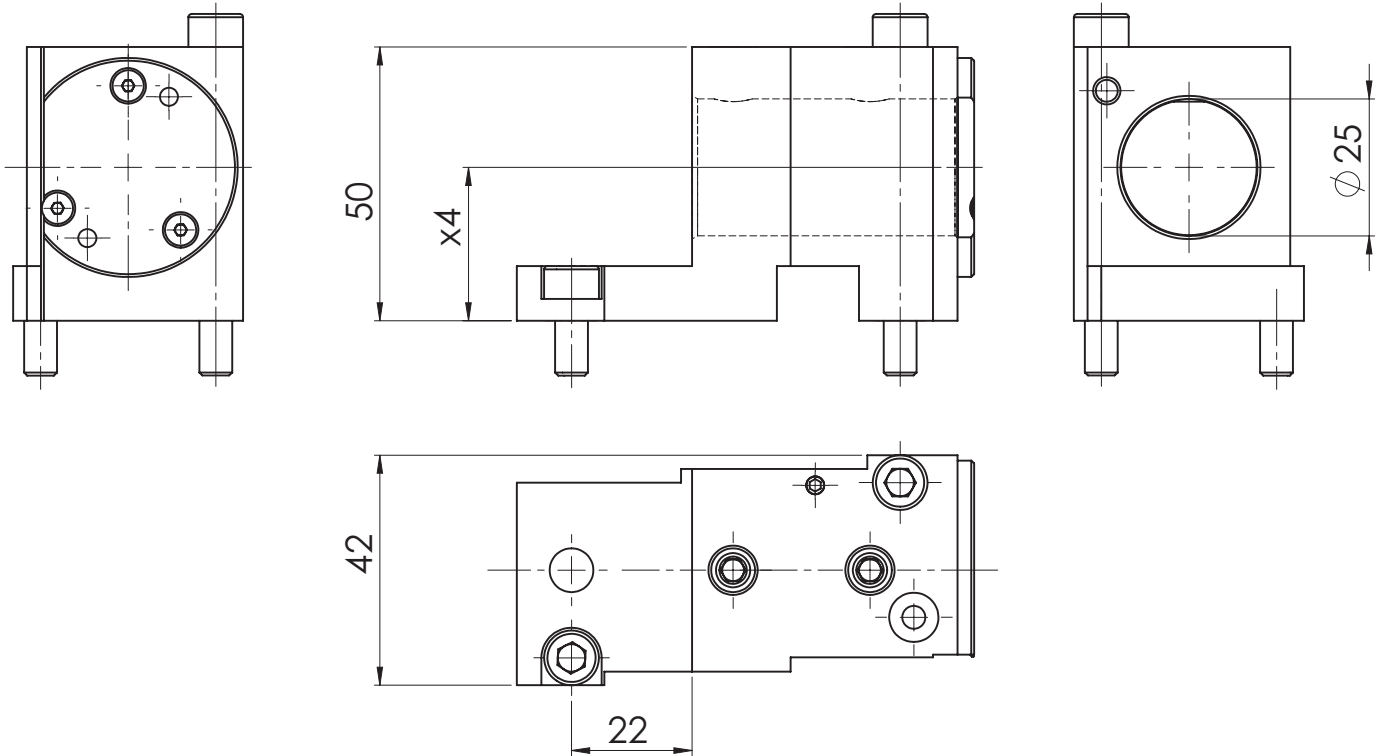
28				x	x		WFE.022.H28.DGST
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# Tornos Swiss Baureihe

**Modularer Basishalter**  
 modular basic holder  
 Support de base modulaire

**WG 35**



[mm]	Spindle Broche Spindel	[Nm] T max	[rpm] n max i	Outside cooling Lubrificat. ext. Aussenkühlung	Internal cooling Lubrificat. cent. Innenkühlung	[bar] p	Order no. N° de Code Bestellnummer
x4				x	x		WFE.025.H28.DGST

**Passende Rundschaftraufnahmen siehe Seite 9.1**  
 matching round shanks see page 9.1

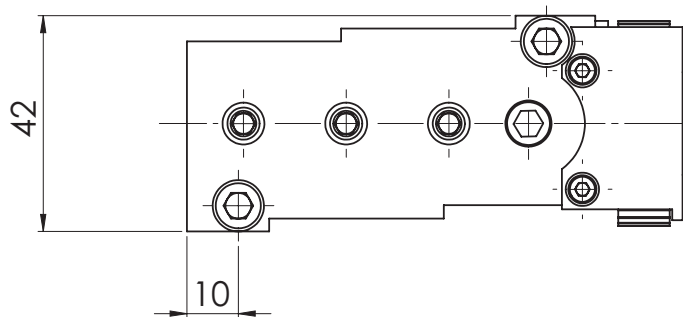
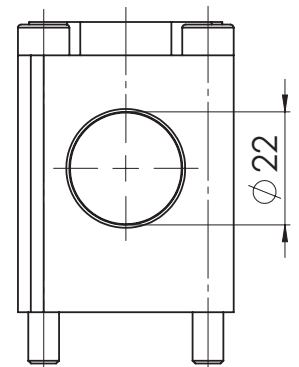
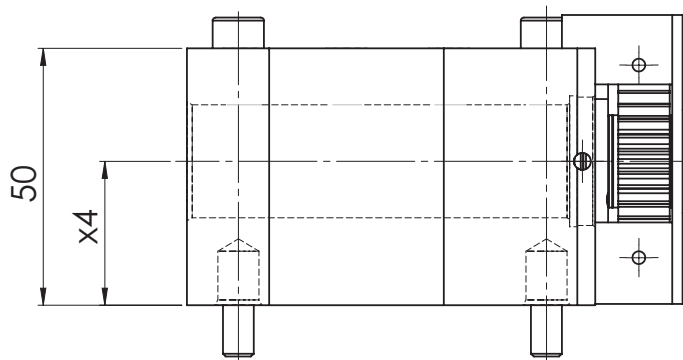
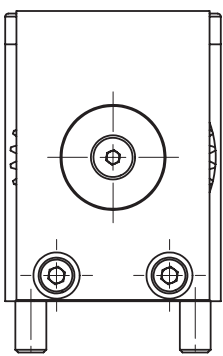
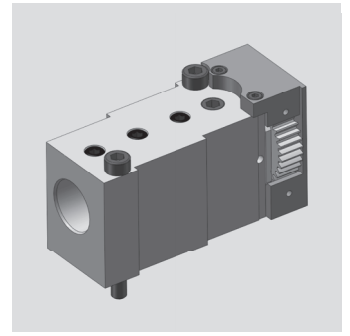
# Tornos Swiss Baureihe

## Modularer Basishalter

modular basic holder

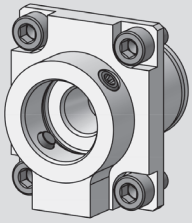
Support de base modulaire

WG 35



[mm]	Spindle Broche	[Nm]	[rpm]	Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
x4	Spindel	T max	n max	i	Aussenkühlung Innenkühlung	p	Bestellnummer

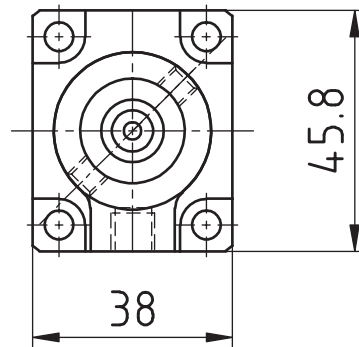
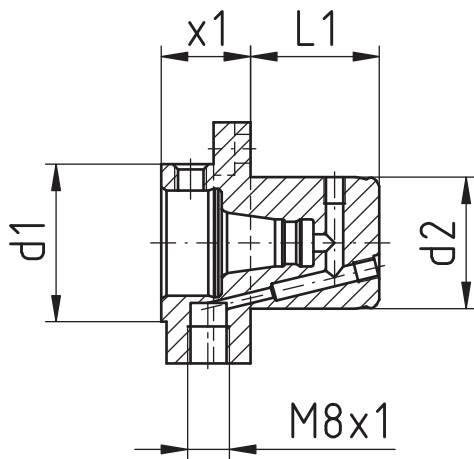
28						x	MPU.TO.D22.H28.DGST
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# Tsugami

**Modularer Basishalter**  
 modular basic holder  
 Support de base modulaire

**WG 35**



[mm]	[mm]	[mm]	[mm]	Spindle Broche	[Nm]	[rpm]		Outside cooling Lubrificat. ext.	Internal cooling Lubrificat. cent.	[bar]	Order no. N° de Code
<b>d1</b>	<b>d2</b>	<b>x1</b>	<b>L1</b>	<b>Spindel</b>	<b>T max</b>	<b>n max</b>	<b>i</b>	<b>Aussenkühlung</b>	<b>Innenkühlung</b>	<b>p</b>	<b>Bestellnummer</b>
30	25	17	24,5	WFB 20-12				x	x		WFB.020.SHT.Z25.TS.R

Modulare Drehhalter

**WF-MICRO**

**WF**  
&

Werkzeugtechnik

**WF-Micro**  
think future



**Katalog**  
**MI-02**



# Inhaltsverzeichnis für WF-MICRO

Table of contents for WF-MICRO  
Table des matières pour WF-MICRO

Beschreibung / Description	Seite / Page
<b>Produktvorteile</b> Product advantages WF-Micro	<b>10.1</b>
<b>Gebrauch und Wartung der WF-Micro Schnittstelle</b> Handling and maintenance for WF-Micro connection	<b>10.2</b>
<b>WF-Micro Funktionsprinzip</b> WF-Micro function	<b>10.3</b>
<b>WFMS-Modulare Vierkanthalter</b> WFMS-Modular square holders	<b>10.4</b>
<b>WFMS-Drehhalter</b> WFMS-Turning tool holder	<b>10.5 - 10.9</b>
<b>WFMS-Drehhalter System HORN</b> WFMS-Turning holder with internal cooling Typ HORN	<b>10.10 - 10.17</b>
<b>WFMS-Rohlinge und Grundhalter</b> WFMS-Blanks and basic holders	<b>10.18</b>

WG = Warengruppe  
Article group  
Groupe de marchandise

WG 11 = \_\_\_\_\_

WG 35 = \_\_\_\_\_

WG 40 = \_\_\_\_\_

# Einsparungspotential durch WF-MICRO



WF-Micro – das innovative modulare Adaptersystem für statische Werkzeuge auf allen gängigen Langdrehmaschinen und Mehrspindeldrehautomaten, das Ihnen eine bis dato unerreichbare Produktivität ermöglicht.

Der Wechsel der Wendeschneidplatten ist oft durch die Bauweise der Maschinen nur bedingt möglich. Meist müssen die kompletten Grundhalter ausgebaut werden. Dies ist sehr zeitaufwändig und führt zu hohen Stillstandszeiten.

Das gehört jetzt der Vergangenheit an.

Die modularen WF-Micro Halter sind in den Ausführungen 10x10, 12x12, 1/2"x1/2" und 16x16 lieferbar.

- Grundhalter mit integriertem Kühlmittelanschluss ermöglichen den Einsatz auf jeder möglichen Position in der Maschine.
- Die einfache Einhandbedienung erlaubt einen sicheren und einfachen Wechsel der Wendeschneidplattenadapter.
- Sämtliche Adapter können außerhalb der Maschine voreingestellt und vermessen werden.
- Der Werkzeugwechsel erfolgt innerhalb weniger Sekunden.
- Die Rüst- und Nebenzeiten werden auf ein Minimum reduziert und die Produktivität Ihrer Maschine auf ein Maximum gesteigert.
- Die Konzeption der Schnittstelle als Kurzkegel mit Plananlage und zylindrischer Abstützung garantiert eine exakte Lagepositionierung und Genauigkeit im einstelligen  $\mu$ -Bereich.
- Die schwingungsdämpfende Eigenschaft der WF-Micro Schnittstelle ergibt deutlich bessere Bearbeitungsergebnisse und längere Standzeiten der Wendeschneidplatten.

**Nutzen Sie die Vorteile von WF-Micro und steigern Sie ihre Produktivität.**



# Gebrauch und Wartung

Handling and maintenance

## **Hinweis zur Befestigung**

Zunächst einen Kegelgewindestift unter Verwendung eines Drehmoment-Schraubendrehers anziehen, dabei 1-2 mal lösen und wieder anziehen. Dadurch wird eine optimale Positionierung der Bauteile erreicht. Der 2. Kegelgewindestift wird nun ebenfalls(wie oben angeführt) angezogen.

**Empfohlenes Anzugsdrehmoment beträgt beim WFM-System: 4 Nm.**

## **Pflege und Wartung**

Die Oberfläche der Planflächen, der Kegelbohrung und Kegelzapfen sind vor Gebrauch zu reinigen und mit einem Öl-Schmierfilm zu versehen. Um eine optimale Befestigung und Lösbarkeit der Kegelgewindestifte zu erreichen, wird empfohlen die Kegelgewindestifte mit z.B. Molykote 1000 oder einer ähnlichen Heiss-Schraubenpaste zu behandeln.

## **Advice for fixing**

First tighten one threaded pin, in doing so 1 or 2 times unscrew and tighten again. Thereby you get an optimum positioning of the components. The second threaded taper pin you will tighten with the same method.

**Recommended locking torque for the WFM System is 4 Nm.**

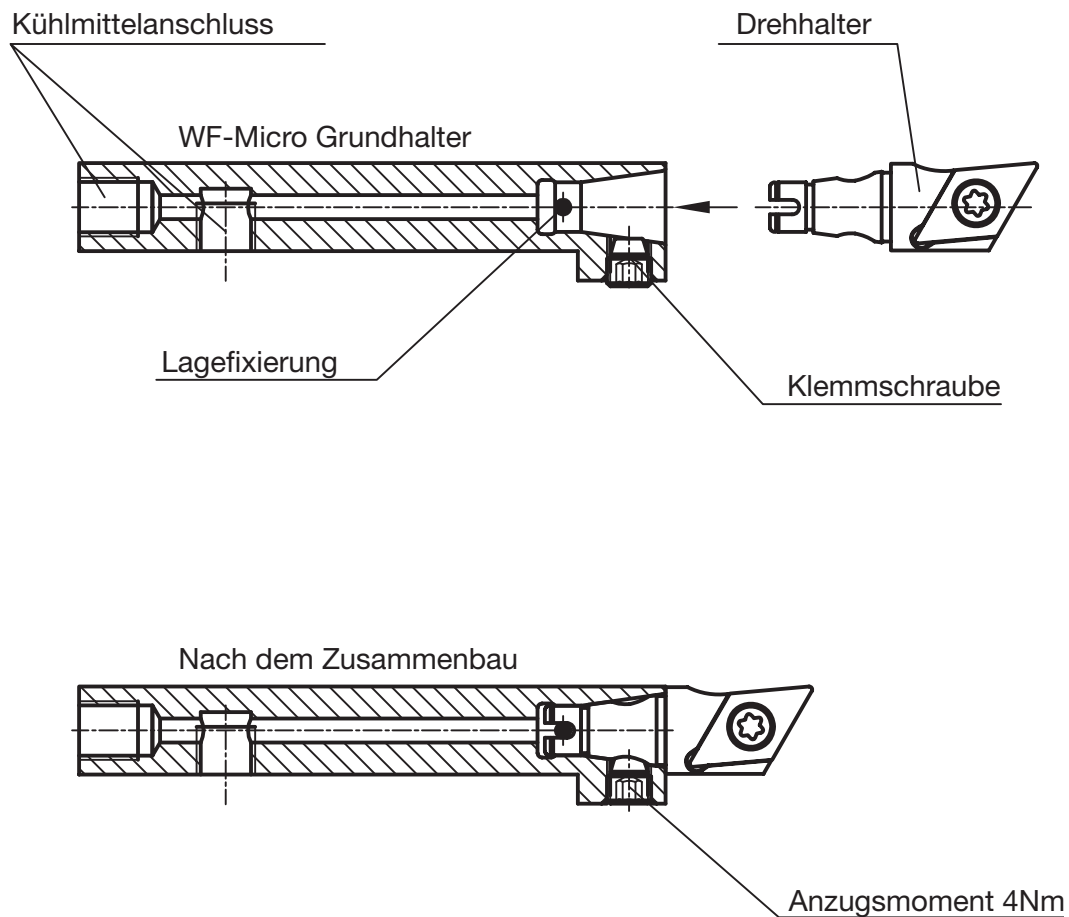
## **Support and maintenance**

The surface of the face, the cone drill and cone pin must be cleaning and lubricate with oil before using. To reach an optimum fixing and resolvability of the threaded taper pins, are recommended to use for example Molykote 1000 or something similar.



# WF-MICRO Funktionsprinzip

WF-MICRO function



## Vorteile des WF-Micro Systems

- Einfache Bedienung (nur eine Klemmschraube)
- Garantierte Lagefixierung beim Fügen
- Höchste Präzision und Steifigkeit durch patentiertes Kegel-Plananlage-System mit zyl. Abstützung
- Ausserhalb der Maschine voreinstellbar

## advantages of the WF-Micro system

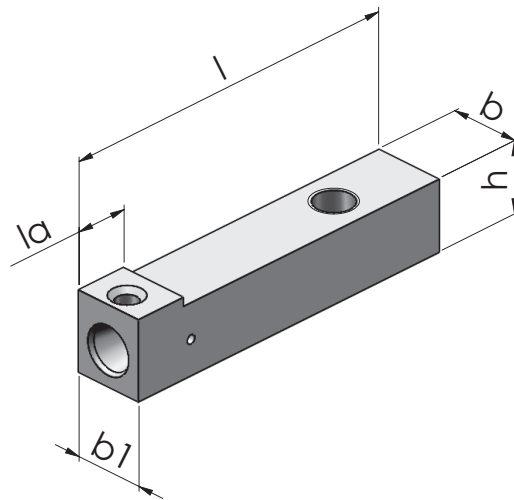
- simple handing (only one screw)
- guaranteed positioning
- highest precision and stiffness through patented taper and face system cylindrical stabilizer
- adjustment outside the machine

# WF & F

ph HORN ph

# WFMS - Modulare Vierkanthalter

WFMS - modular square holders



Holder size	[mm]	[mm]	[mm]	[mm]	[mm]	Coolant connection	Order no.
Haltergröße	b	h	l	b1	la	KM-Anschluss	Bestellnummer
3/8"	9,525	10,763	80	12	12	M8x1	WFMS.VKT.009,5.IK
10	10	11	80	12	12	M8x1	WFMS.VKT.010.IK
12	12	12	80	12		M8x1	WFMS.VKT.012.IK
12	12	12	65	12		M8x1	WFMS.VKT.012.IK.065
1/2"	12,7	12,35	80	12,7		M8x1	WFMS.VKT.012,7.IK
5/8"	15,875	15,938	80	15,875		G1/8"	WFMS.VKT.015,8.IK
16	16	15	80	16		G1/8"	WFMS.VKT.016.IK
16	16	14	65	16		G1/8"	WFMS.VKT.016.IK.065*

**\*wird bei folgenden Citizen Maschinen auf Station T5 eingesetzt:** L20E-2M8  
 \* is used on the following Citizen machines on station T5: L20E-2M10  
 L20E-2M12

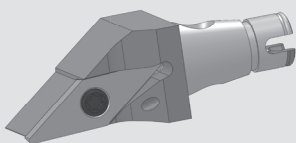
# WFMS - modulare Drehhalter ISO Typ Bezeichnungssystem

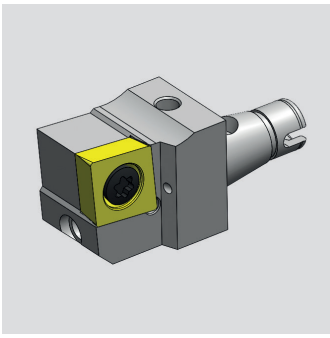
WFMS-modular turning holders  
ISO type Designation system



Befestigungsart	Wendeplattenform	Klemmhalterform	Wendeplatten-freiwinkel	Schnittrichtung	Schneidplatten-größe	Kühlung
S  (geschraubt durch Bohrung)	C 80° 	J 93° 	C 	L 	07	IK  (Innenkühlung)
	D 55° 	L 95° 		N 	09	
	V 35° 	N 63° 		R 	11	
		V 72,5° 			13	

Produktbeispiel:  
WF.M.12.SVJCR.11.IK

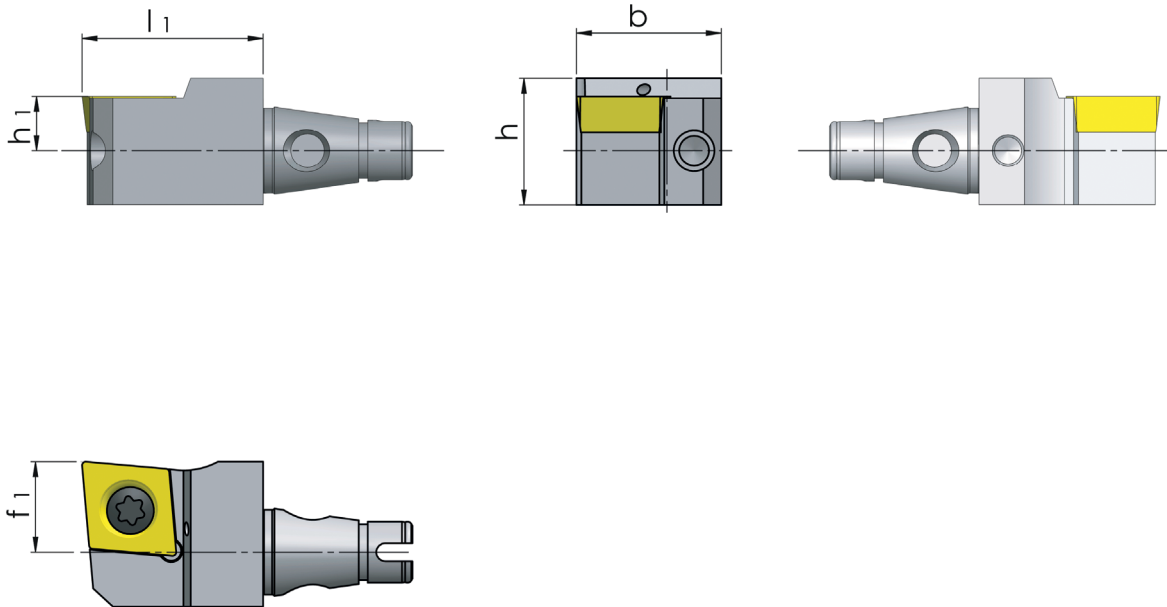




# WFMS - modulare Drehhalter ISO C Typ

WFMS - modular turning holders  
ISO C type

WG 40

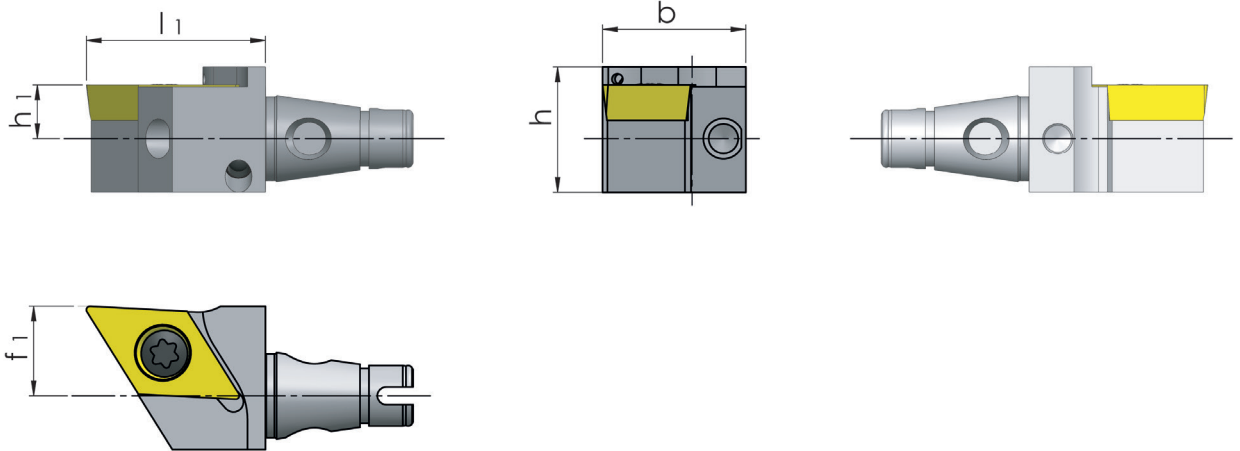
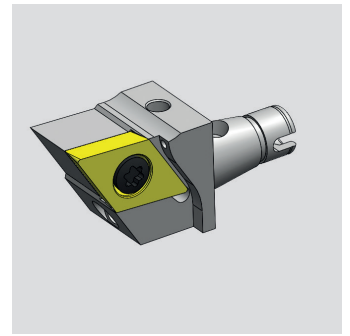


fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	Order no.
passend für Halter	h	b	l1	h1	f1	Bestellnummer
10x10, 12x12, 1/2"x1/2"	14	16	20	6	6	WF.M.12.SCLCL.09.IK
10x10, 12x12, 1/2"x1/2"	14	16	20	6	6	WF.M.12.SCLCR.09.IK
16x16	20	18	20	8	8	WF.M.16.SCLCL.09.IK
16x16	20	18	20	8	8	WF.M.16.SCLCR.09.IK

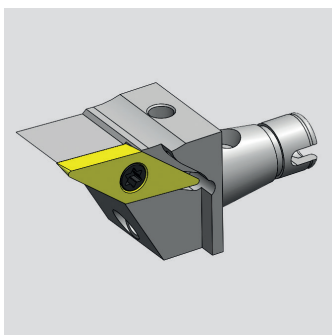
# WFMS - modulare Drehhalter ISO D Typ

WFMS - modular turning holders  
ISO D type

WG 40



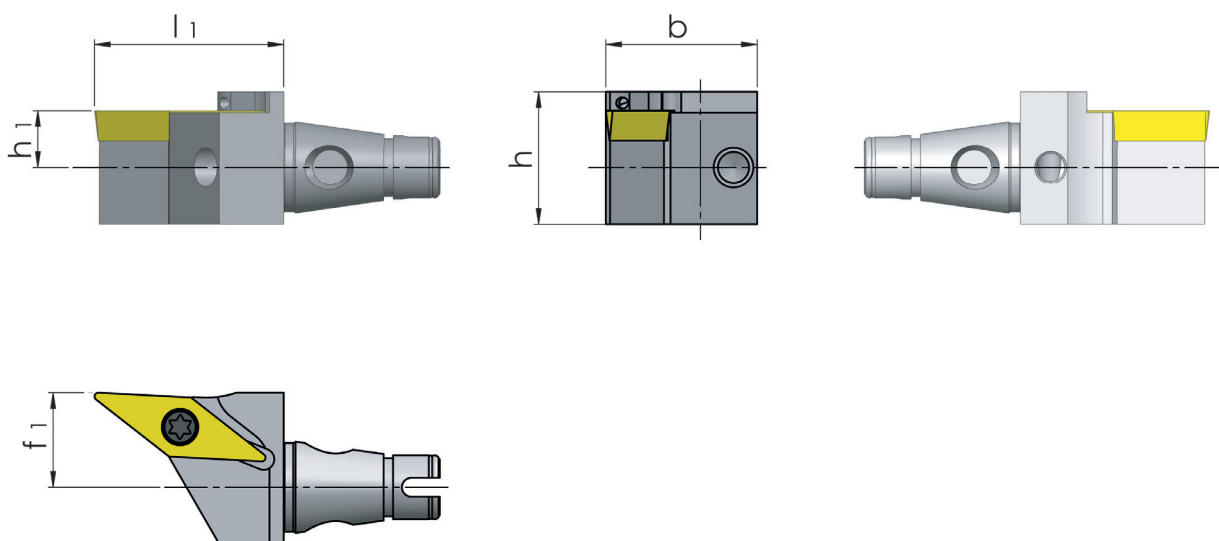
fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	Order no.
passend für Halter	h	b	l1	h1	f1	Bestellnummer
10x10, 12x12, 1/2"x1/2"	14	16	20	6	6	WF.M.12.SDJCL.11.IK
10x10, 12x12, 1/2"x1/2"	14	16	20	6	6	WF.M.12.SDJCR.11.IK
10x10, 12x12, 1/2"x1/2"	14	16	25	6	0	WF.M.12.SDNCN.11.IK
16x16	18	18	20	8	8	WF.M.16.SDJCL.11.IK
16x16	18	18	20	8	8	WF.M.16.SDJCR.11.IK



# WFMS - modulare Drehhalter ISO V Typ

WFMS - modular turning holders  
ISO V type

WG 40

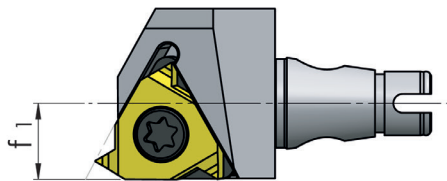
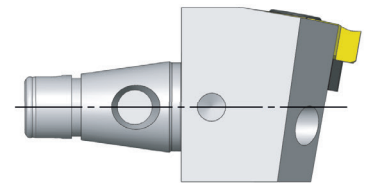
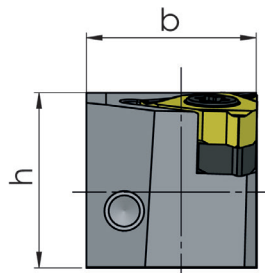
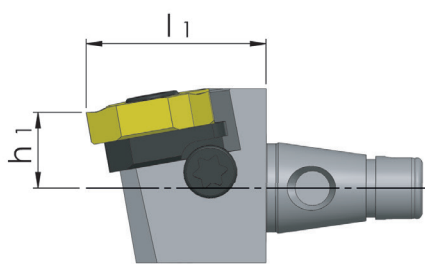
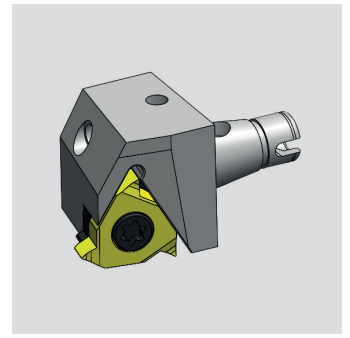


fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	Order no.
passend für Halter	h	b	l1	h1	f1	Bestellnummer
10x10, 12x12, 1/2"x1/2"	14	16	20	6	6	WF.M.12.SVJCL.11.IK
10x10, 12x12, 1/2"x1/2"	14	16	20	6	6	WF.M.12.SVJCR.11.IK
10x10, 12x12, 1/2"x1/2"	15	16	25	6	0	WF.M.12.SVVCN.11.IK
10x10, 12x12, 1/2"x1/2"	14	16	25	6	10	WF.M.12.SVJCL.13.IK
10x10, 12x12, 1/2"x1/2"	14	16	25	6	6	WF.M.12.SVJCR.13.IK
16x16	18	18	20	8	8	WF.M.16.SVJCL.11.IK
16x16	18	18	20	8	8	WF.M.16.SVJCR.11.IK

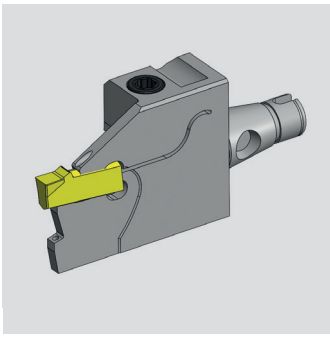
# WFMS - modulare Drehhalter

WFMS - modular turning holders

WG 40



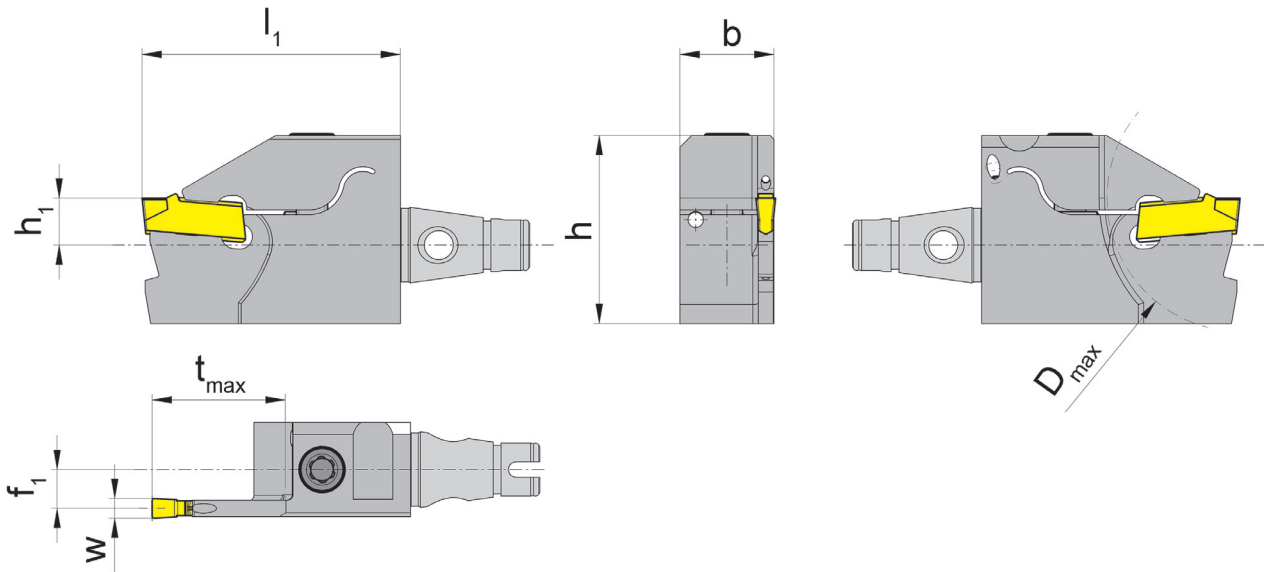
fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	Order no.
passend für Halter	h	b	l1	h1	f1	Bestellnummer
10x10, 12x12, 1/2"x1/2"	19	16	20	6	6	WF.M.12.11E.IK.R
16x16	18	18	20	8	8	WF.M.16.16E.IK.R



# WFMS - Klemmhalter HORN HORN H100

WFMS - Toolholder  
HORN H100

WG 40



fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		Order no.
passend für Halter	h	b	l1	h1	f1	tmax	Dmax	w	Größe	Bestellnummer
10x10, 12x12, 1/2"x1/2"	24	12	33	6	5,2	17	34	2	01	WF.M.12.R100.4.41.IK
10x10, 12x12, 1/2"x1/2"	24	12	33	6	4,95	17	34	2,5	02	WF.M.12.R100.4.42.IK
10x10, 12x12, 1/2"x1/2"	24	12	33	6	4,75	17	34	3	03	WF.M.12.R100.4.43.IK
16x16	26	16	33	8	7,2	17	34	2	01	WF.M.16.R100.4.41.IK
16x16	26	16	33	8	6,95	17	34	2,5	02	WF.M.16.R100.4.42.IK
16x16	26	16	33	8	6,75	17	34	3	03	WF.M.16.R100.4.43.IK

## Spare Parts

### Ersatzteile

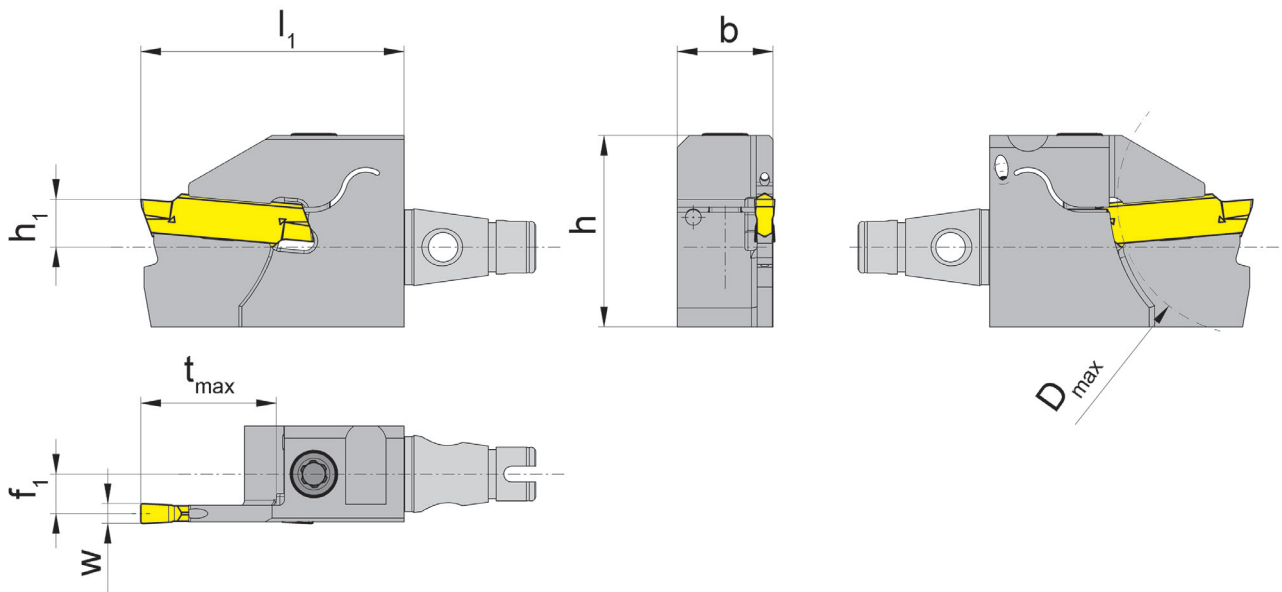
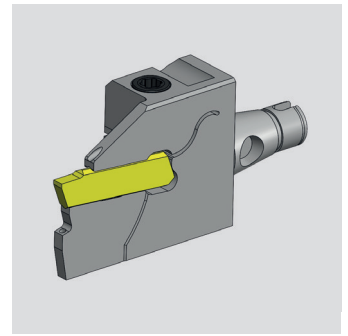
Screw Spannschraube	Clamp Spannelement	TORX PLUS Wrench TORX PLUS-Schlüssel	For torque specification Nm Das Anzugsmoment der Schrauben ist Nm.	Toolholder Klemmhalter
4.20T15P		T15PL	4,3	WF.M.1...R100...IK



# WFMS - Klemmhalter HORN HORN H224

WFMS - Toolholder  
HORN H224

WG 40

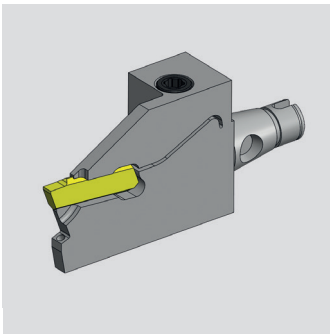


fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		Order no.
passend für Halter	h	b	l1	h1	f1	tmax	Dmax	w	Größe	Bestellnummer
10x10, 12x12, 1/2"x1/2"	24	12	33	6	5,2	17	34	2	01	WF.M.12.R224.4.41.IK
10x10, 12x12, 1/2"x1/2"	24	12	33	6	4,95	17	34	2,5	02	WF.M.12.R224.4.42.IK
10x10, 12x12, 1/2"x1/2"	24	12	33	6	4,75	17	34	3	03	WF.M.12.R224.4.43.IK
16x16	26	16	33	8	7,2	17	34	2	01	WF.M.16.R224.4.41.IK
16x16	26	16	33	8	6,95	17	34	2,5	02	WF.M.16.R224.4.42.IK
16x16	26	16	33	8	6,75	17	34	3	03	WF.M.16.R224.4.43.IK

## Spare Parts

### Ersatzteile

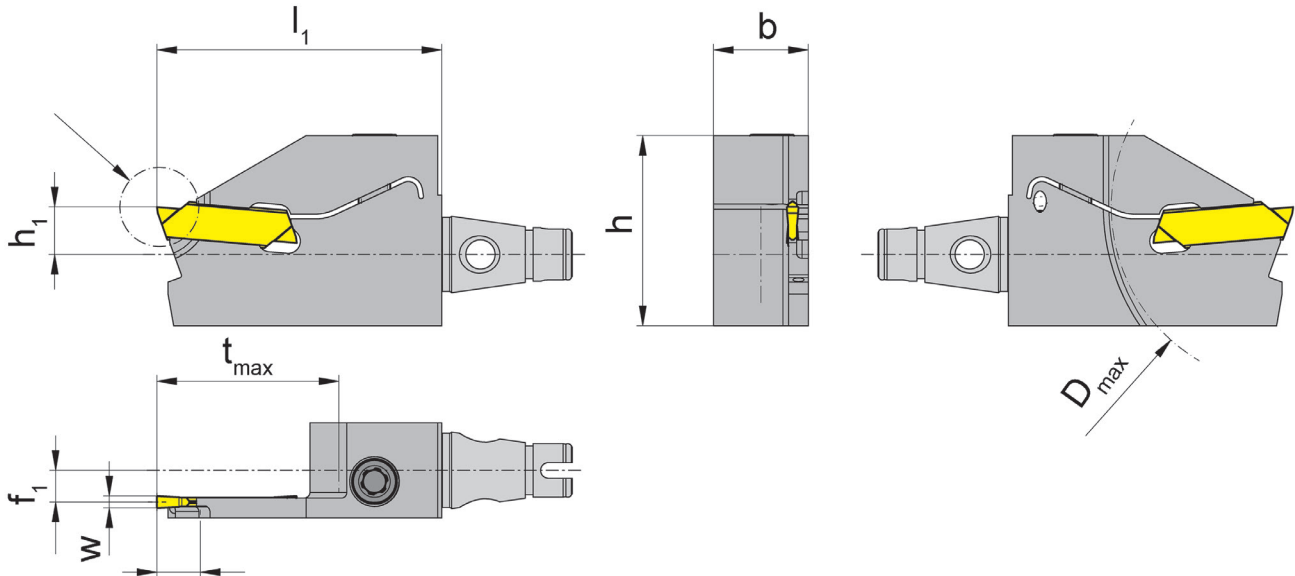
Screw Spannschraube	Clamp Spannelement	TORX PLUS Wrench TORX PLUS-Schlüssel	For torque specification Nm Das Anzugsmoment der Schrauben ist Nm.	Toolholder Klemmhalter
4.20T15P		T15PL	4,3	WF.M.1...R224...IK



# WFMS - Klemmhalter HORN HORN H264

WFMS - Toolholder  
HORN H264

WG 40



fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		Order no.
passend für Halter	h	b	l1	h1	f1	tmax	Dmax	w	Größe	Bestellnummer
10x10, 12x12, 1/2"x1/2"	24	12	36	6	4	5,5	10	1,5	01	WF.M.12.R264.1.51.IK
16x16	23	16	36	8	6	5,5	10	1,5	01	WF.M.16.R264.1.51.IK

## Spare Parts

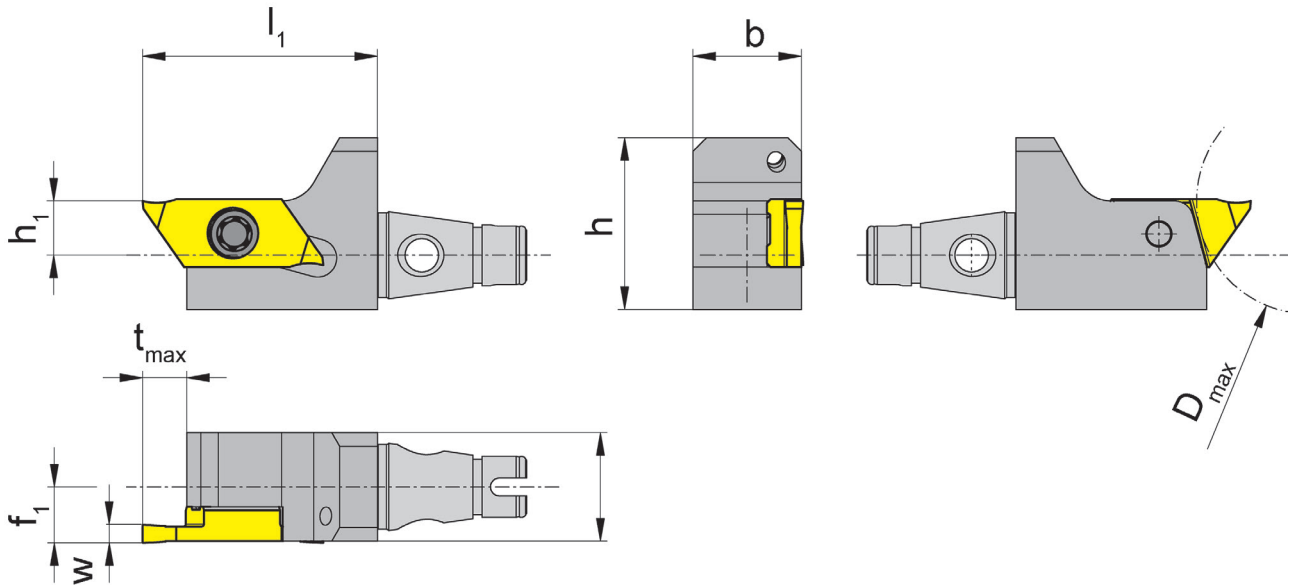
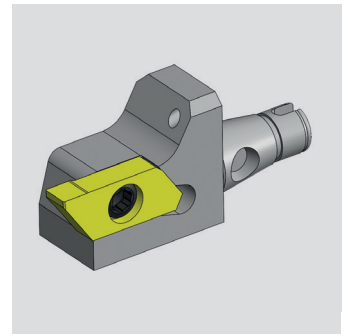
### Ersatzteile

Screw Spannschraube	Clamp Spannelement	TORX PLUS Wrench TORX PLUS-Schlüssel	For torque specification Nm Das Anzugsmoment der Schrauben ist Nm.	Toolholder Klemmhalter
4.20T15P		T15PL	4,3	WF.M.1...R264.1.51.IK

# WFMS - Klemmhalter HORN HORN H274

WFMS - Toolholder  
HORN H274

WG 40

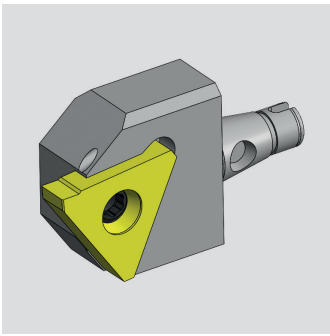


fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		Order no.
passend für Halter	h	b	l1	h1	f1	tmax	Dmax	w	Größe	Bestellnummer
10x10, 12x12, 1/2"x1/2"	19	12	26	6	6,2	6	25	04	01	WF.M.12.R274.2.24.IK
16x16	23	16	26	8	8,2	6	25	04	02	WF.M.16.R274.2.24.IK

## Spare Parts

### Ersatzteile

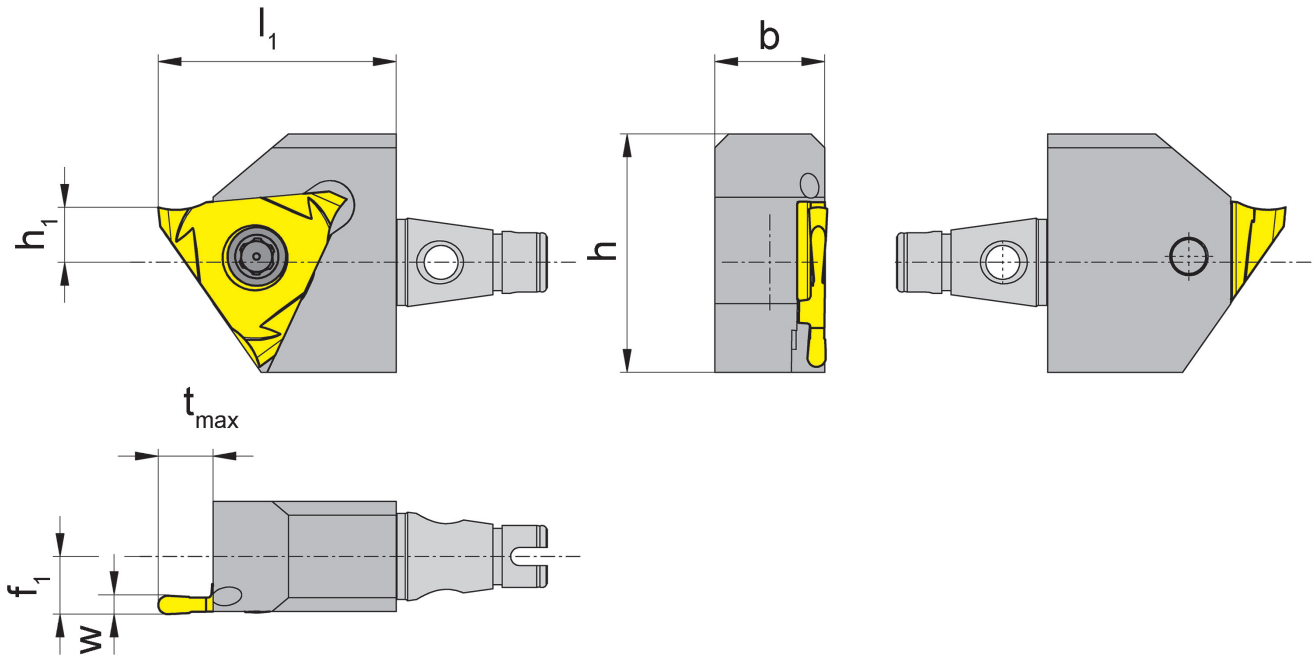
Screw Spannschraube	Clamp Spannelement	TORX PLUS Wrench TORX PLUS-Schlüssel	For torque specification Nm Das Anzugsmoment der Schrauben ist Nm.	Toolholder Klemmhalter
030.3509.T15P		T15PQ	3,0	WF.M.1...R274.2.24.IK



# WFMS - Klemmhalter HORN HORN H356

WFMS - Toolholder  
HORN H356

WG 40



fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]		Order no.
passend für Halter	h	b	l1	h1	f1	Größe	Bestellnummer
10x10, 12x12, 1/2"x1/2"	26	12	26	6	6,3	03	WF.M.12.R356.1.23.IK
16x16	26	16	26	8	8,3	03	WF.M.16.R356.1.23.IK

## Spare Parts

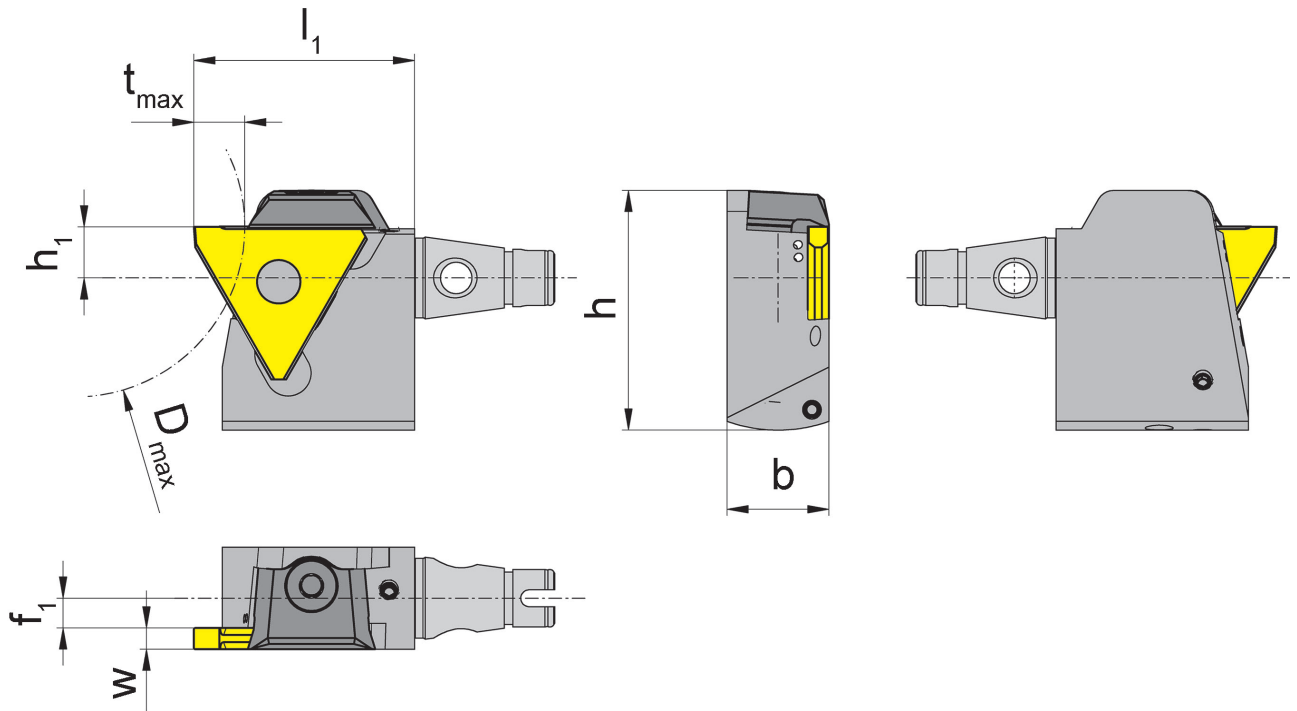
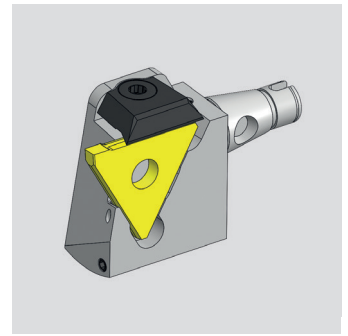
### Ersatzteile

Screw Spannschraube	Clamp Spannelement	TORX PLUS Wrench TORX PLUS-Schlüssel	For torque specification Nm Das Anzugsmoment der Schrauben ist Nm.	Toolholder Klemmhalter
030.500P.0232		T20PQ	6,0 - 6,5	WF.M.12.R356.1.23.IK
5.12T20P		T20PQ	6,0 - 6,5	WF.M.16.R356.1.23.IK

# WFMS - Klemmhalter HORN HORN H360

WFMS - Toolholder  
HORN H360

WG 40

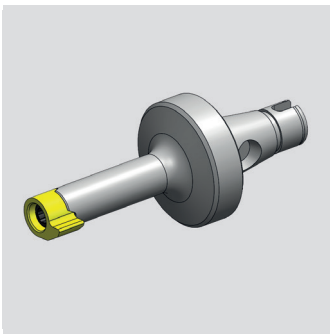


fits for holder	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		Order no.
passend für Halter	h	b	l1	h1	f1	tmax	Dmax	w	Größe	Bestellnummer
10x10, 12x12, 1/2"x1/2"	28,2	12	26	6	4,5	4	40	0,5 - 1,9	01	WF.M.12.R360.1.51.IK
10x10, 12x12, 1/2"x1/2"	28,2	12	26	6	3,5	6	40	1,9 - 2,9	02	WF.M.12.R360.2.52.IK
10x10, 12x12, 1/2"x1/2"	28,2	12	26	6	2,5	6	40	2,9 - 3,9	03	WF.M.12.R360.2.53.IK
16x16	30,2	16	26	8	6,5	4	40	0,5 - 1,9	01	WF.M.16.R360.1.51.IK
16x16	30,2	16	26	8	5,5	6	40	1,9 - 2,9	02	WF.M.16.R360.2.52.IK
16x16	30,2	16	26	8	4,5	6	40	2,9 - 3,9	03	WF.M.16.R360.2.53.IK

## Spare Parts

### Ersatzteile

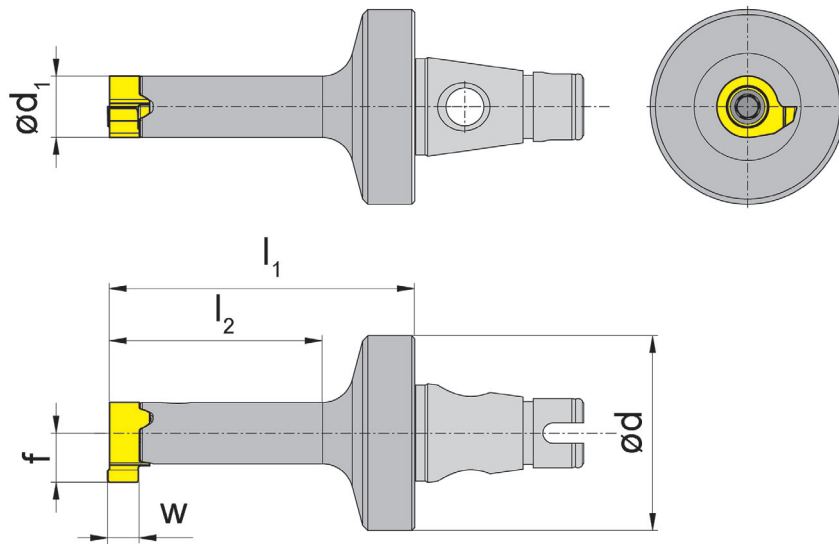
Screw Spannschraube	Clamp Spannelement	TORX PLUS Wrench TORX PLUS-Schlüssel	For torque specification Nm Das Anzugsmoment der Schrauben ist Nm.	Toolholder Klemmhalter
	12.3	T10PL	3,0	WF.M.1...R360...IK



# WFMS - Klemmhalter HORN HORN Mini 106 - 11P

WFMS - Toolholder  
HORN Mini 106 - 11P

WG 40



fits for holder	[mm]	[mm]	[mm]	[mm]	Order no.
passend für Halter	d	d1	l1	l2	Bestellnummer
Ø 19,05-28	19	4,4	17	8,5	WF.M.RB106.00.IK
Ø 19,05-28	19	5,2	19	10	WF.M.RB107.00.IK
Ø 19,05-28	19	6	21,5	12,5	WF.M.B108.00.IK
Ø 19,05-28	19	6	30	21	WF.M.B108.01.IK
Ø 19,05-28	19	6	21	12,5	WF.M.RB10P.00.IK
Ø 19,05-28	19	8	26	16,5	WF.M.B111.00.IK
Ø 19,05-28	19	8	38,5	29	WF.M.B111.01.IK
Ø 19,05-28	19	7	24	15	WF.M.RB11P.00.IK

## Spare Parts

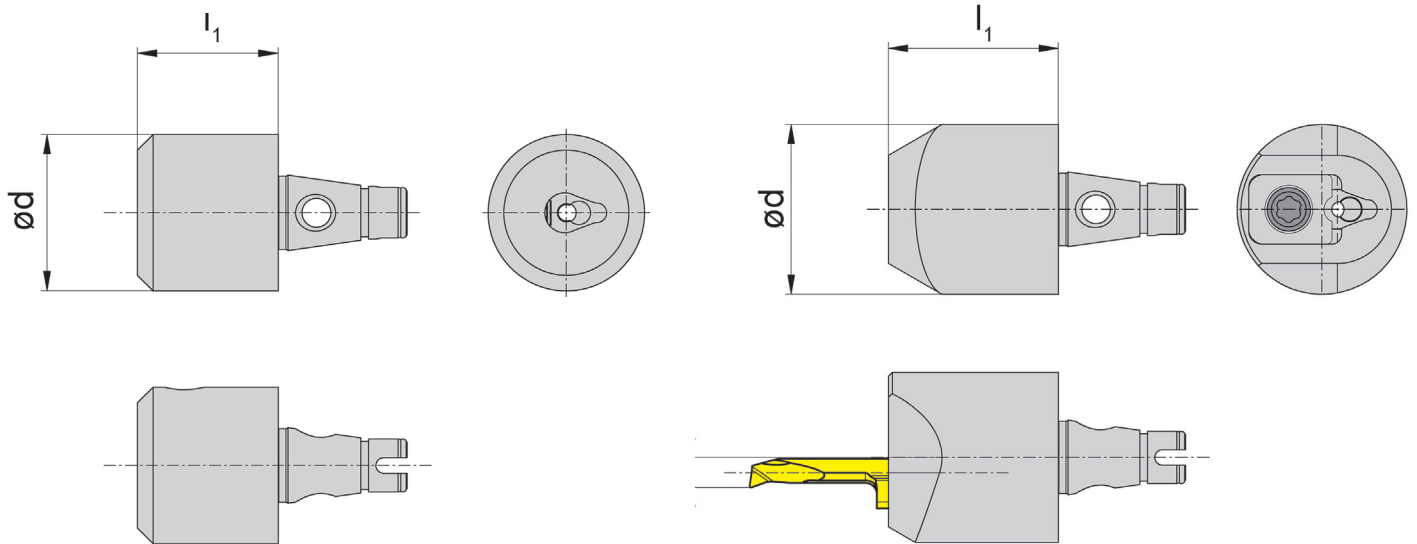
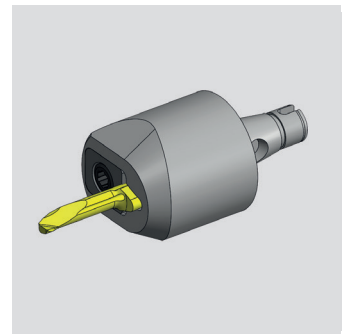
### Ersatzteile

Screw	Clamp	TORX PLUS Wrench	For torque specification Nm	Toolholder
Spannschraube	Spannelement	TORX PLUS-Schlüssel	Das Anzugsmoment der Schrauben ist Nm.	Klemmhalter
1.8.4TEP		T6PL	0,9	WF.M.RB106.00.IK
2.2.5T7EP	010.0105.03	T7PL	1,1	WF.M.RB107.00.IK
2.6.5T8EP	010.0105.04	T8PL	1,2	WF.M.B108.00.IK / .B10P./..
3.5.12T10EP	010.0105.05	T10PL	3	WF.M.B111.00.IK
3.10T9P		T9PL	1,8	WF.M.RB11P.00.IK

# WFMS - Klemmhalter HORN HORN Supermini 105-110

WFMS - Toolholder  
HORN Supermini 105-110

WG 40



fits for holder	[mm]	[mm]	[mm]	[mm]	Order no.
passend für Halter	d	l1	f1	*b	Bestellnummer
Ø 19,05-28	20	18	-	-	WF.M.B105.IK
Ø 19,05-28	22	30	-	-	WF.M.B110.IK
Ø 19,05-28	22	22	3,3	5,9	WF.M.B105.S.03.IK
Ø 19,05-28	22	22	3,9	6,4	WF.M.B105.S.04.IK
Ø 19,05-28	21	22	5,3	7,0	WF.M.B105.S.05.IK

\*b = Schneidplattenhöhe

\*b = Height of insert

## Spare Parts

### Ersatzteile

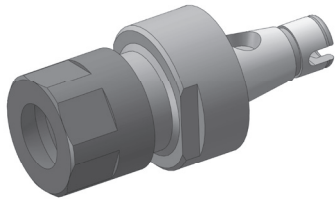
Screw	Clamp	TORX PLUS Wrench	For torque specification Nm	Toolholder
Spannschraube	Spannelement	TORX PLUS-Schlüssel	Das Anzugsmoment der Schrauben ist Nm.	Klemmhalter
6.075T15P		T15PQ	5	WF.M.B105.IK / WF.M.B110.IK
	010.0105.03	T15PL	2	WF.M.B105.S.03.IK
	010.0105.04	T15PL	2	WF.M.B105.S.04.IK
	010.0105.05	T15PL	2	WF.M.B105.S.05.IK



# WFMS - Rohlinge und Grundhalter

WFMS - blanks and basic holders

WG 40

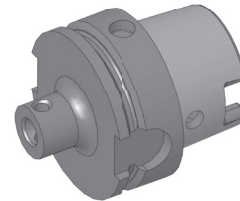


## Drehhalter Typ ER11

Turning holder type ER11

**Bestellnummer** WFMS.E11.025.M

Order no.

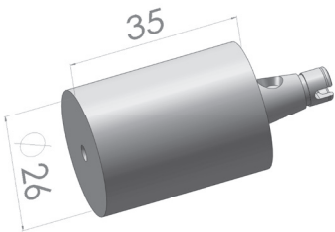


## Drehhalter Grundhalter HSK63

Turning holder basic holder HSK63

**Bestellnummer** WFMS.020.H63

Order no.

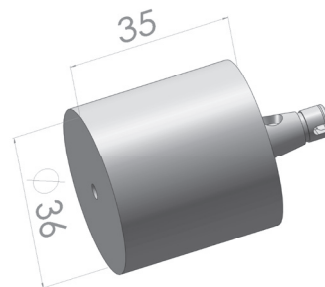


## Drehhalter Rohling Ø 26

Turning holder blank Ø 26

**Bestellnummer** WFMS.R.D26x35

Order no.

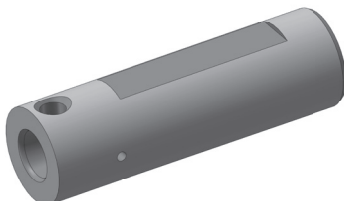


## Drehhalter Rohling Ø 36

Turning holder blank Ø 36

**Bestellnummer** WFMS.R.D36x35

Order no.

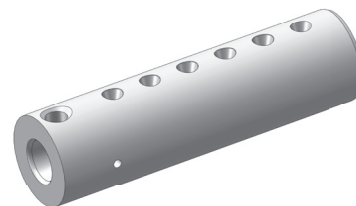


## Drehhalter Rundschaft

Turning holder cylindrical

**Bestellnummer** WFMS.RS.20.065.IK

Order no.



## Drehhalter Rundschaft

Turning holder cylindrical

**Bestellnummer** WFMS.RS.22.080.IK

Order no.



# THE EVOLUTION WF-MICRO System for DECO 10

driven and static toolholders

**WF**  
&

Werkzeugtechnik



**Minimize the costs of cutting tools  
and increase productivity**

- quick change
- presetting outside of machine
- highest runout



Modulare Aggregatetechnik

**WFB Adapter**



Werkzeugtechnik



**Katalog  
WFB-02**



# Inhaltsverzeichnis für WFB-Adapter

Table of contents for WFB-adapter  
Table des matières pour WFB-adapteur

Beschreibung / Description	Seite / Page
<b>WFB - Aufsatz</b> WFB top piece	11.2
<b>Gebrauch und Wartung der WFB-Schnittstelle</b> Handling and maintenance for WFB connection Manutention et maintenance pour WFB connexion	11.3
<b>Produkt-Vorteile der WFB-Schnittstelle</b>	11.4-11.5
<b>Product advantages of WFB connection</b>	11.6-11.7
<b>WFB - Produktübersicht (Auszug)</b> WFB - Product overview WFB - Vue d'ensemble de produit	11.8-11.9
<b>WFB - Grundaufnahmen / Voreinstelladapter</b> WFB - Master shanks WFB - Module de base	11.10-11.11
<b>WFB - Weldon für Zylinderschäfte DIN 1835 B</b> WFB - Weldon for parallel shanks WFB - Weldon pour queues cylindriques	11.12-11.13
<b>WFB - WN für Zylinderschäfte DIN 1835 E</b> WFB - Whistle Notch for parallel shanks WFB - Whistle Notch pour queues cylindriques	11.14-11.15
<b>WFB - Schrumpffutter</b> WFB - Shrink fit chucks WFB - Mandrins de frettage	11.16-11.17
<b>Bedienungsanleitung für zweigeteilte Schrumpffutter System WFB</b> Operation instructions for two split shrink fit chucks system WFB Mode d'emploi pour deux divisé mandrins de frettage système WFB	11.18
<b>WFB - Sägeblattaufnahmen</b> WFB - Tool holders for saw blade WFB - Mandrins pour lame de scie	11.19
<b>WFB - Spannzangenfutter 8° Typ ER</b> WFB - Collet chucks 8° type ER WFB - Mandrins porte-pinces 8° type ER	11.20-11.21
<b>WFB - Softsynchro® mit IKZ</b> WFB - Softsynchro® with internal cooling system WFB - Softsynchro® avec arrosage central	11.22
<b>WFB - Hydro-Dehnspannfutter</b> WFB - Hydraulic expansion chuck WFB - Mandrin hydraulique	11.23
<b>WFB-Drehhalter W-T mit IKZ</b> WFB - Turning tool holder W-T with internal cooling system WFB - Rotatif porte-outil W-T avec arrosage central	11.24
<b>WFB-Klemmhalter W-T HORN Mini mit IKZ</b> WFB - Toolholder W-T HORN Mini with internal cooling system WFB - Porte-outil W-T HORN Mini avec arrosage central	11.25

# Inhaltsverzeichnis für WFB-Adapter

Table of contents for WFB-adapter  
Table des matières pour WFB-adapteur



Beschreibung / Description	Seite / Page
<b>WFB-Klemmhalter W-T HORN Supermini® mit IKZ</b> WFB - Toolholder W-T HORN Supermini® with internal cooling system WFB - Porte-outil W-T HORN Supermini® avec arrosage central	<b>11.26</b>
<b>WFB - HORN Frälerschaft mit IKZ</b> WFB - HORN milling shank with internal cooling WFB - HORN arbre de coupe avec arrosage central	<b>11.27</b>
<b>WFB-Bohrstangenhalter</b> WFB - Boring bar holder WFB - Porte-outil pour barres d'alésage	<b>11.28</b>
<b>WFB - Aufsteckfräserdorne mit IKZ</b> WFB - Milling machine arbors with internal cooling system WFB - Mandrins porte-fraises avec arrosage central	<b>11.29</b>
<b>WFB - Verschlussstopfen</b> WFB - Closing plug WFB - Bouchon d'étanchéité	<b>11.30</b>
<b>WFB - Reduzierungen / Verlängerungen</b> WFB - Reductions / Extensions WFB - Réductions / Prolongations	<b>11.31</b>
<b>WFB - Kontrolldorne</b> WFB - Test arbors WFB - Mandrins de contrôle	<b>11.32</b>
<b>WFB - Bohrstangen-Rohlinge</b> WFB - Boring bar-blanks WFB - Barres à l'état brut	<b>11.33</b>
<b>Spannzangen-Sätze mit Holzsockel System ER / ESX</b> Collets System ER / ESX in wooden board Pincés de serrage Système ER / ESX en socle de bois	<b>11.35</b>
<b>Spannzangen System ER / ESX ER11 / ER16 / ER20</b> Collets System ER / ESX Pincés de serrage Système ER / ESX	<b>11.36</b>
<b>Spannzangen System ER / ESX ER25 / ER32 / ER40</b> Collets System ER / ESX Pincés de serrage Système ER / ESX	<b>11.37</b>
<b>WFB - Ersatzteile / Zubehör</b> WFB - Spare parts / Accessories WFB - Pièces de rechange / Accessoires	<b>11.38</b>

**WG = Warengruppe**  
**Article group**  
**Groupe de marchandise**

**WG 11 = \_\_\_\_\_**

**WG 35 = \_\_\_\_\_**



# WFB-Aufsatz

WFB top piece

WG 35

ZOLLER<sup>®</sup>  
faszination messen<sup>®</sup>



Adapter >>GA<<



Vorsatzhalter Gr.I  
Tool post size I



Adapter SK50



WFB-Adapter

Der WFB-Adapter wird über 2 Kegeltgewindestifte im WFB-Aufsatz fixiert und ist somit optimal positioniert.  
The WFB-Adapter will be fixed in the WFB top piece via 2 threaded taper pins and is thus optimally positioned.

Durch die 100%-ige Einstellbarkeit der Adaptersysteme auf einem ZOLLER Einstell- und Messgerät reduziert sich die Maschinenrüstzeit nahezu gegen null. Teurer Maschinenstillstand kann somit vermieden werden.  
Thanks to the excellent adjustability of the adapter systems on ZOLLER tool presetter and measuring machines setup times are reduced towards zero thus avoiding expensive machine downtimes.

- ✓ Hohe Wechselgenauigkeiten (<math><2\mu</math>) und absoluter Formschluss  
High changing accuracy (<math><2\mu</math>) and absolute form fit
- ✓ Optimale Kraftübertragung und Steifigkeit durch kompakten Aufbau  
Optimum power transmission and rigidity thanks to a compact assembly
- ✓ Flexible Anwendungsmöglichkeiten, wie z. B. Spannzangenfutter, Weldon, Schrumpffutter u. v. a. m.  
Flexible application spectrum, e.g. collet chucks, weldon, shrink fit chucks and others
- ✓ Für angetriebene oder feststehende Werkzeuge geeignet  
Suitable for driven or stationary tools
- ✓ Einsetzbar in Dreh- und Fräsmaschinen und Bearbeitungszentren  
To be used in turning and milling machines and machining centres
- ✓ Einfacher und günstiger Spannmechanismus durch 2 Kegeltgewindestifte  
Simple and convenient clamping mechanism via 2 threaded taper pins
- ✓ Geringe Rüstzeiten  
Reduced setup times
- ✓ Modular aufgebautes System, keine aufwändigen Sonderwerkzeughalter notwendig  
Modular designed system, no complex tool holders required

WFB top piece	Adapter >>GA<<	Vorsatzhalter Gr.I / Tool post size I	Adapter SK50 / ISO 50
WFB-Aufsatz	Art.-Nr. / Item no.	Art.-Nr. / Item no.	Art.-Nr. / Item no.

WFB20-12	WFB.6120.Y50	WFB.6020.Y50	WFB.6320.Y50
WFB24-16	WFB.6121.Y50	WFB.6021.Y50	WFB.6321.Y50
WFB32-20	WFB.6122.Y50	WFB.6022.Y50	WFB.6322.Y50
WFB40-25	WFB.6123.Y50	WFB.6023.Y50	WFB.6323.Y50
WFB50-32	WFB.6124.Y50	WFB.6024.Y50	WFB.6324.Y50

# Gebrauch und Wartung der WFB-Schnittstelle

Handling and maintenance for WFB connection  
Manutention et maintenance pour WFB connexion

WG 35



## Hinweis zur Befestigung

Zunächst einen Kegelgewindestift anziehen, dabei 1-2 mal lösen und wieder anziehen. Dadurch wird eine optimale Positionierung der Bauteile erreicht. Der 2. Kegelgewindestift wird nun ebenfalls (wie oben angeführt) angezogen. Empfohlene Drehmomente entnehmen Sie der unteren Tabelle.

## Advice for fixing

First tighten one threaded taper pin, in doing so 1 or 2 times unscrew and tighten again. Thereby you get an optimum positioning of the components. The second threaded taper pin you will tighten with the same method. Recommended locking torque see in the lower table.

## Pflege und Wartung

Die Oberflächen der Planflächen, der Kegelbohrung und Kegelzapfen sind vor Gebrauch zu reinigen und mit einem Öl-Schmierfilm zu versehen. Um eine optimale Befestigung und Lösbarkeit der Kegelgewindestifte zu erreichen, wird empfohlen die Kegelgewindestifte mit z.B. Molykote 1000 oder einer ähnlichen Heiss-Schraubenpaste zu behandeln.

## Support and maintenance

The surface of the face, the cone drill and cone pin must be cleaning and lubricate with oil before using. To reach an optimum fixing and resolvability of the threaded taper pins, are recommended to use for example Molykote 1000 or something similar.

### Empfohlene Anzugsdrehmomente

Recommended locking torque / Retenue couple

Größe	Kegelgewindestifte	Anzugs-Drehmoment
WFB20-12	M6 x 0,75 / Torx 15 Plus	4 Nm
WFB20-12	M6 x 1 / Torx T15	4 Nm
WFB24-16	M8 x 1 / Torx T25	10 Nm
WFB32-20	M10 x 1	20 Nm

### Empfohlene Anzugsdrehmomente beim Einsatz von Kontrollidornen

Recommended locking torque when running test arbors

Retenue couple à l'usage de Mandrins de contrôle

Größe	Kegelgewindestifte	Anzugs-Drehmoment
WFB20-12	M6 x 0,75 / Torx 15 Plus	2 Nm
WFB20-12	M6 x 1 / Torx T15	2 Nm
WFB24-16	M8 x 1 / Torx T25	5 Nm
WFB32-20	M10 x 1	10 Nm

**WF**  
&

ph HORN ph

# Produkt-Vorteile der WFB-Schnittstelle

WG 35

**Präzise**

Die Kegel/Plananlage mit zylindrischer Abstützung gewährleistet höchste Genauigkeit ( $2\mu$ ) und absoluten Form-schluß.

**Flexibel**

Spannzange, Weldon, Schrumpffutter, um nur die wichtigsten zu nennen, können alle in einen Grundhalter eingesetzt werden. Die Handhabung ist einfach und praxisgerecht.

**Kompakt**

Der extrem kompakte Aufbau gewährleistet eine optimale Kraftübertragung und Systemsteifigkeit. Daraus resultieren höhere Werkstückgenauigkeiten und verbesserte Produktivität.

**Orientierte Schneidenlage**

Auf Umschlag  $< 10\mu$

**Reinigung**

Einfach, da überall leicht zugänglich.



# Produkt-Vorteile der WFB-Schnittstelle

WG 35



Plananlage

## **Wirtschaftlich**

Sie benötigen weniger aufwändige, teure Sonderwerkzeughalter, die Werkzeugstandzeiten verlängern sich erheblich. Die Folge ist die deutliche Minimierung Ihrer Gesamtwerkzeugkosten. Mit dem WFB-System helfen wir Ihnen Ihre Drehmaschine künftig wirklich wirtschaftlich einzusetzen, und teure Nebenzeiten einzusparen. Das neue modulare WFB-System von W&F eröffnet Ihnen hinsichtlich der Präzision und der Flexibilität völlig neue Dimensionen in der Fertigungstechnik.

## **Spannmechanismus**

Äußerst günstig durch 2 Kegelgewindestifte.

## **Schnell**

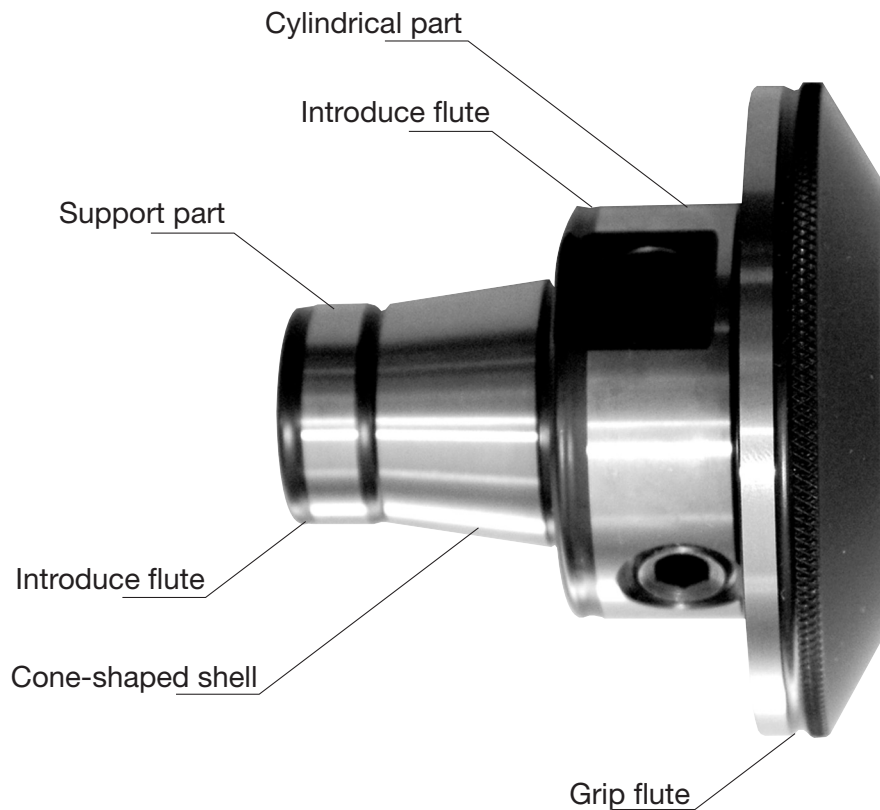
Durch den Einsatz von Werkzeugen, die parallel zur Maschinenlaufzeit voreingestellt werden, reduziert sich die Maschinenrüstzeit nahezu auf Null. Teure Maschinenstillstandzeiten werden vermieden.

## **Universell**

Sowohl für angetriebene als auch für feststehende Werkzeuge, sowie auf Fräsmaschinen und BAZ einsetzbar.

## **Schrumpfen**

Nach vorne und nach innen möglich.



**Precise**

The taper/planned assets with cylindrical support guarantees highest precision (2 $\mu$ ) and completely form fit.

**Flexibel**

Collet, Weldon, schrink fit holder, etc., can be used in all master shanks. Easy and safe to handle. Collet, Weldon, schrink fit holder, etc., can be used in all master shanks. Easy and safe to handle.

**Compact**

The extrem compact construction guarantees an optimum load transmission and system rigidity. Out of it follow workpiece in higher precision and revised productivity.

**Optimized position of cutting edge**

Turnover < 10  $\mu$

**Cleaning**

Simple because of good accessible.

# Product advantages of WFB connection

WG 35



Planned assets

## **Economical**

You need less expensive special tool holders and the tool life will be extended. So you get a minimization of complete costs of tools. With the WFB-system we help you to use your turning machine profitable in the future and to save expensive non-productive time. The new modular WFB-system from W&F enable you with precision and flexibility new dimensions in the production technology.

## **Gripping mechanism**

Exceedingly favorable through 2 threaded taper pins.

## **Quick**

Pre-setting of tools can be effected out of the machine. Setting-up time will be nearly zero. Expensive machine dead time will be avoided.

## **Universal**

Applicable in driven and static tool holder, as well as on milling machine and machining center.

## **Shrinking**

Forward and inward possible.

**W&F**

**ph HORN ph**

# WFB - Produktübersicht (Auszug)

WFB - Product overview  
WFB - Vue d'ensemble de produit

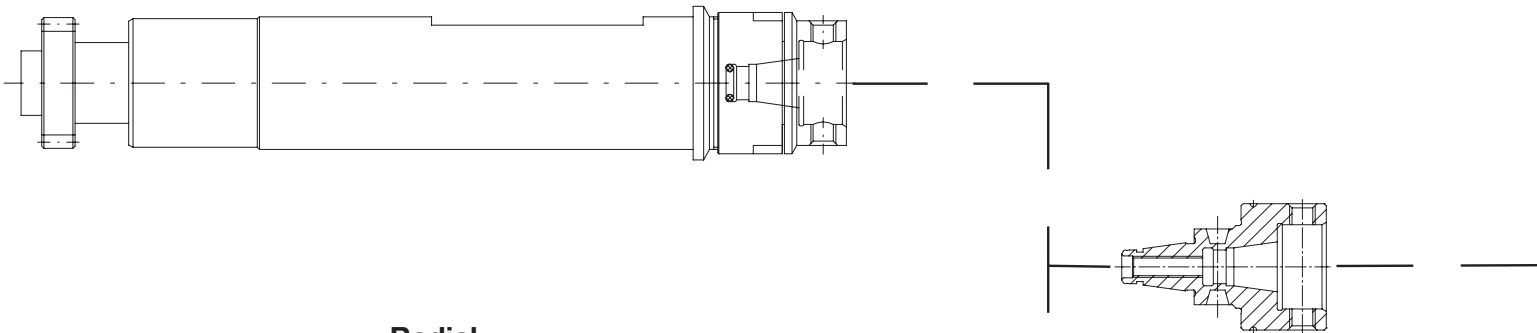
**WG 35**

## WFB - Aggregate

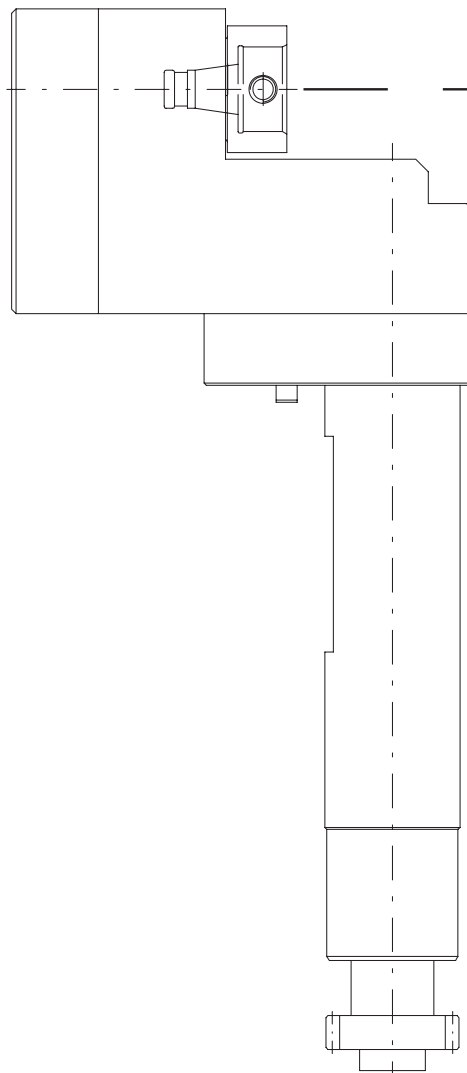
WFB - Aggregates

WFB - Agrégats

### Axial



### Radial



## WFB - Verlängerungen

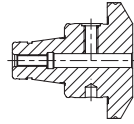
WFB - Extensions

WFB - Prolongations

# WFB - Produktübersicht (Auszug)

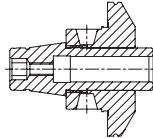
WFB - Product overview  
WFB - Vue d'ensemble de produit

WG 35



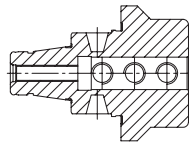
## WFB - Weldon / Whistle Notch für Zylinderschäfte DIN 1835 B / E

WFB - Weldon / Whistle Notch for parallel shanks  
WFB - Weldon / Whistle Notch pour queues cylindriques



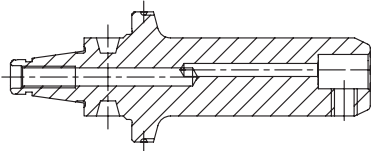
## WFB - Schrumpffutter

WFB - Shrink fit chucks  
WFB - Mandrins de frettage



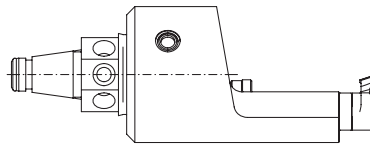
## WFB - Bohrstangenhalter

WFB - Boring bar holder  
WFB - Porte-outil pour barres d'alésage



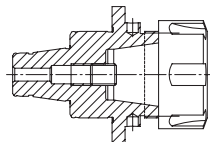
## WFB - Klemhalter W-T HORN Supermini® mit IKZ

WFB - Toolholder W-T HORN Supermini® with internal cooling system  
WFB - Porte-outil W-T HORN Supermini® avec arrosage central



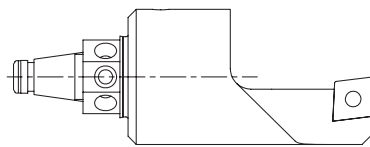
## WFB - Klemhalter W-T HORN Mini mit IKZ

WFB - Toolholder W-T HORN Mini with internal cooling system  
WFB - Porte-outil W-T HORN Mini avec arrosage central



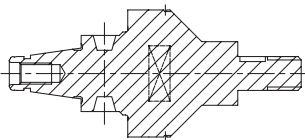
## WFB - Spannzangenfutter 8° Typ ER

WFB - Collet chucks 8° type ER  
WFB - Mandrins porte-pinces 8° type ER



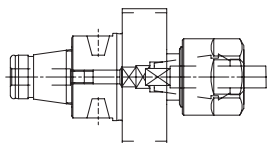
## WFB - Drehhalter W-T mit IKZ

WFB - Turning tool holder W-T with internal cooling system  
WFB - Rotatif porte-outil W-T avec arrosage central



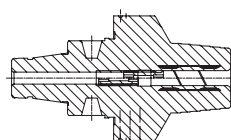
## WFB - Sägeblattaufnahmen

WFB - Tool holders for saw blade  
WFB - Mandrins pour lame de scie



## WFB - Softsynchro® mit IKZ

WFB - Softsynchro® with internal cooling system  
WFB - Softsynchro® avec arrosage central



## WFB - Hydro-Dehnspannfutter

WFB - Hydraulic expansion chuck  
WFB - Mandrin hydraulique

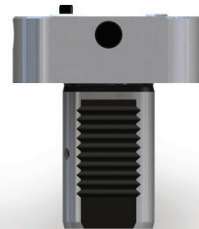
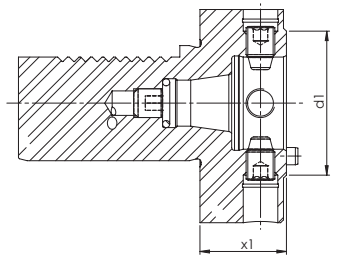
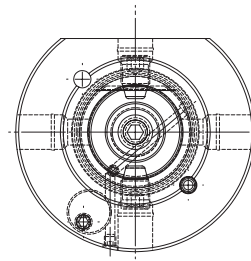
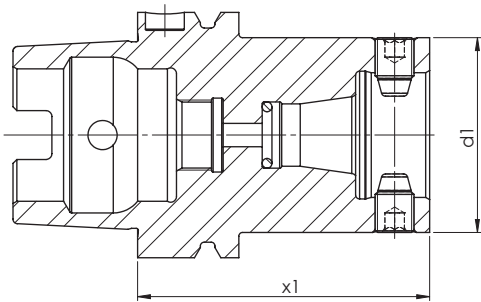
# W&F

ph HORN ph

## WFB - Grundaufnahmen / Voreinstelladapter

WFB - Master shanks  
WFB - Module de base

WG 35



Size	Type	[mm]	[mm]	Order no.
Grandeur	Type			N° de Code
Größe	Typ	d1	x1	Bestellnummer

WFB20-12	HSK 63	30	55	WFB.020.H63
WFB24-16	HSK 63	40	65	WFB.024.H63
WFB32-20	HSK 40	50	40	WFB.032.H40
WFB32-20	HSK 63	50	75	WFB.032.H63
WFB32-20	HSK 100	50	75	WFB.032.H100

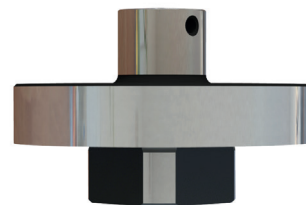
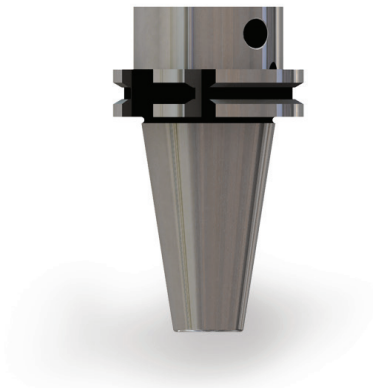
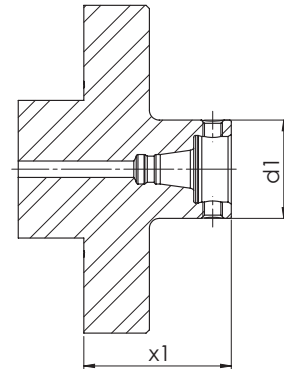
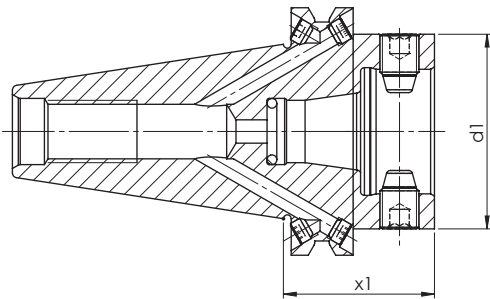
Size	Type	[mm]	[mm]	Order no.
Grandeur	Type			N° de Code
Größe	Typ	d1	x1	Bestellnummer

WFB20-12	VDI 30	30	28	WFB.020.V30
WFB24-16	VDI 30	40	28	WFB.024.V30
WFB32-20	VDI 25	50	28	WFB.032.V25
WFB32-20	VDI 30	50	28	WFB.032.V30
WFB32-20	VDI 40	50	30	WFB.032.V40

# WFB - Grundaufnahmen / Voreinstelladapter

WFB - Master shanks  
WFB - Module de base

WG 35



Size	Type	[mm]	[mm]	Order no.
Grandeur	Type			N° de Code
Größe	Typ	d1	x1	Bestellnummer

WFB20-12	SK 40	30	40	WFB.020.S40
WFB20-12	SK 50	30	40	WFB.020.S50
WFB24-16	SK 40	40	40	WFB.024.S40
WFB24-16	SK 50	40	40	WFB.024.S50
WFB32-20	SK 40	50	40	WFB.032.S40
WFB32-20	SK 50	50	40	WFB.032.S50

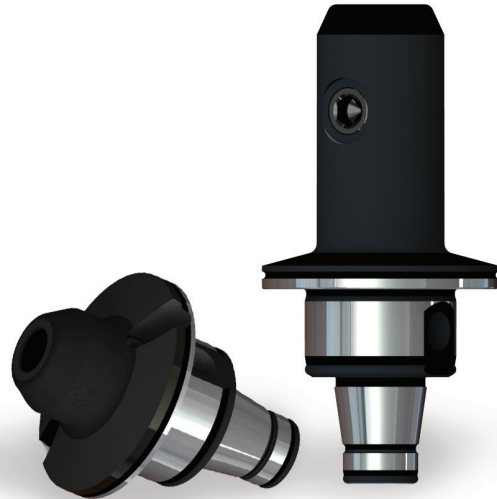
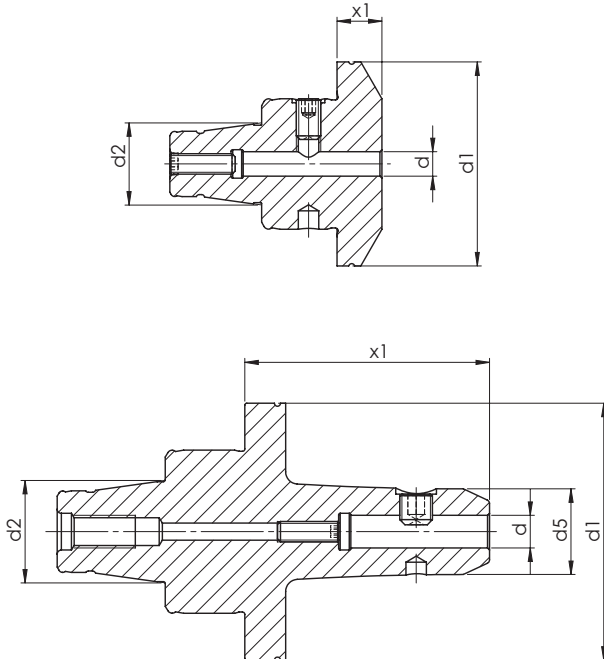
Size	Type	[mm]	[mm]	Order no.
Grandeur	Type			N° de Code
Größe	Typ	d1	x1	Bestellnummer

WFB20-12	Z01	30	45	WFB.020.SHT.Z01
WFB24-16	Z01	40	45	WFB.024.SHT.Z01
WFB32-20	Z01	50	65	WFB.032.SHT.Z01

**W&F****ph HORN ph**

# WFB - Weldon für Zylinderschäfte DIN 1835 B

WFB - Weldon for parallel shanks  
WFB - Weldon pour queues cylindriques

**WG 35**

**Verwendung:** Zum Spannen von Werkzeugen mit Zylinderschaft DIN 1835 Form B.  
**Lieferumfang:** Mit eingebauter Spanschraube

**Application:** For clamping tools with parallel shank DIN 1835 form B.  
**Scope of supply:** Weldon end mill adaptor incl. locking screw

**Application:** Pour montage d'outils à queue cylindrique DIN 1835 forme B.  
**Livraison:** Mandrin à pinces Weldon compris vis de serrage

Size Grandeur <b>Größe</b>	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB 20-12	3	29	12	12	25	WFB.203.025K
WFB 20-12	4	29	12	14	25	WFB.204.025K
WFB 20-12	6	29	12	17	16	WFB.206.016K
WFB 20-12	6	29	12	17	27	WFB.206.027K
WFB 20-12	6	30	12	17	27	WFB.206.027T
WFB 20-12	6	30	12	17	43	WFB.206.043.S
WFB 20-12	6	30	12	25	42,5	WFB.206.043T
WFB 20-12	8	29	12	21	16	WFB.208.016K
WFB 20-12	8	29	12	21	27	WFB.208.027K
WFB 20-12	8	30	12	21	27	WFB.208.027T
WFB 20-12	8	30	12	25	42,5	WFB.208.043T
WFB 20-12	10	29	12	24	37	WFB.210.037K
WFB 20-12	10	30	12	24	37	WFB.210.037T
WFB 20-12	10	30	12	25	42,5	WFB.210.043T



# WFB - Weldon für Zylinderschäfte DIN 1835 B

WFB - Weldon for parallel shanks  
WFB - Weldon pour queues cylindriques

WG 35



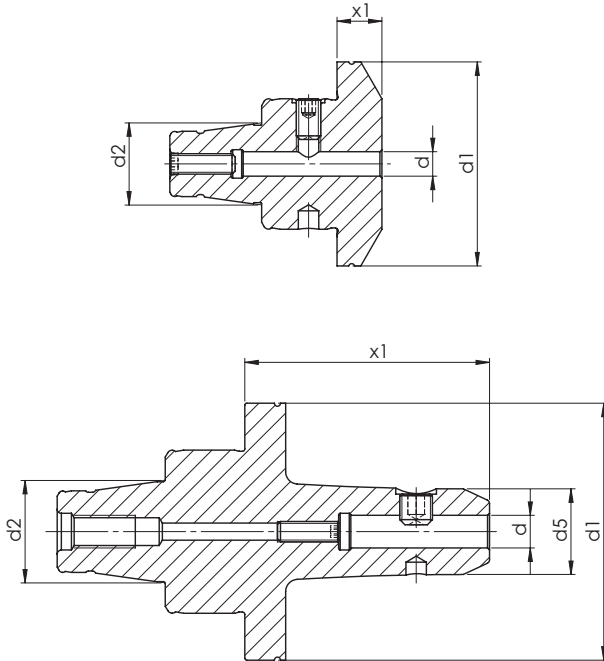
Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB 20-12	16	30	12	33	55	WFB.216.055
WFB 24-16	6	40	16	11	14	WFB.246.014T
WFB 24-16	6	40	16	17	27	WFB.246.027T
WFB 24-16	8	40	16	21	27	WFB.248.027T
WFB 24-16	10	40	16	17	15	WFB.241.015T
WFB 24-16	10	40	16	24	25	WFB.241.025T
WFB 24-16	12	40	16	27	30	WFB.241.230T
WFB 32-20	4	50	20	14	28	WFB.304.028
WFB 32-20	6	50	20	-	11	WFB.306.011
WFB 32-20	6	50	20	17	28	WFB.306.028T
WFB 32-20	6	50	20	17	40	WFB.306.040
WFB 32-20	6	50	20	17	60	WFB.306.060
WFB 32-20	8	50	20	-	11	WFB.308.011
WFB 32-20	8	50	20	21	28	WFB.308.028T
WFB 32-20	8	50	20	21	40	WFB.308.040
WFB 32-20	8	50	20	21	60	WFB.308.060
WFB 32-20	10	50	20	-	11	WFB.310.011
WFB 32-20	10	50	20	24	25	WFB.310.025T
WFB 32-20	10	50	20	24	35	WFB.310.035
WFB 32-20	10	50	20	24	60	WFB.310.060
WFB 32-20	12	50	20	27	14	WFB.312.014T
WFB 32-20	12	50	20	-	15	WFB.312.015
WFB 32-20	12	50	20	27	35	WFB.312.035
WFB 32-20	12	50	20	27	60	WFB.312.060
WFB 32-20	14	50	20	50	31	WFB.314.031
WFB 32-20	14	50	20	29	60	WFB.314.060
WFB 32-20	16	50	20	50	44	WFB.316.044
WFB 32-20	16	50	20	35	60	WFB.316.060
WFB 32-20	18	50	20	50	44	WFB.318.044
WFB 32-20	18	50	20	35	60	WFB.318.060
WFB 32-20	20	50	20	50	47	WFB.320.047
WFB 32-20	20	50	20	39	60	WFB.320.060
WFB 32-20	25	50	20	47	60	WFB.325.060

**WF**  
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ph HORN ph

# WFB - WN für Zylinderschäfte DIN 1835 E

WFB - Whistle Notch for parallel shanks  
WFB - Whistle Notch pour queues cylindriques

**WG 35**

**Verwendung:** Zum Spannen von Werkzeugen mit Zylinderschaft DIN 1835 Form E  
**Lieferumfang:** Mit eingebauter Spann- und Anschlagschraube

**Application:** For clamping tools with parallel shank DIN 1835 form E

**Scope of supply:** Weldon end mill adaptor incl. locking screw and adjusting screw

**Application:** Pour montage d'outils à queue cylindrique DIN 1835 forme E

**Livraison:** Mandrin à pinces Weldon compris vis de serrage et vis de réglage

Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	6	30	12	17	27	WFB.206.127T
WFB20-12	6	29	12	17	27	WFB.206.127K
WFB20-12	6	30	12	25	42,5	WFB.206.143T
WFB20-12	8	29	12	21	27	WFB.208.127K
WFB20-12	8	30	12	21	27	WFB.208.127T
WFB20-12	8	30	12	25	42,5	WFB.208.143T
WFB20-12	8	29	12	25	42,5	WFB.208.143K
WFB20-12	10	29	12	24	37	WFB.210.137K
WFB20-12	10	30	12	24	37	WFB.210.137T
WFB20-12	10	30	12	25	42,5	WFB.210.143T
WFB24-16	6	40	16	11	14	WFB.246.114T
WFB24-16	6	40	16	17	27	WFB.246.127T
WFB24-16	8	40	16	21	27	WFB.248.127T
WFB24-16	10	40	16	17	15	WFB.241.115T

# WFB - WN für Zylinderschäfte DIN 1835 E

WFB - Whistle Notch for parallel shanks  
WFB - Whistle Notch pour queues cylindriques

WG 35



Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB24-16	10	40	16	24	25	WFB.241.125T
WFB24-16	12	40	16	27	30	WFB.241.330T
WFB32-20	4	50	20	14	28	WFB.304.128
WFB32-20	6	50	20	-	11	WFB.306.111
WFB32-20	6	50	20	17	28	WFB.306.128T
WFB32-20	6	50	20	17	40	WFB.306.140
WFB32-20	6	50	20	17	60	WFB.306.160
WFB32-20	8	50	20	-	11	WFB.308.111
WFB32-20	8	50	20	21	40	WFB.308.140
WFB32-20	8	50	20	21	60	WFB.308.160
WFB32-20	8	50	20	21	28	WFB.308.128T
WFB32-20	10	50	20	-	11	WFB.310.111
WFB32-20	10	50	20	24	25	WFB.310.125T
WFB32-20	10	50	20	24	35	WFB.310.135
WFB32-20	10	50	20	24	60	WFB.310.160
WFB32-20	12	50	20	27	14	WFB.312.114T
WFB32-20	12	50	20	-	15	WFB.312.115
WFB32-20	12	50	20	27	35	WFB.312.135
WFB32-20	12	50	20	27	60	WFB.312.160
WFB32-20	14	50	20	50	31	WFB.314.131
WFB32-20	14	50	20	29	60	WFB.314.160
WFB32-20	16	50	20	50	44	WFB.316.144
WFB32-20	16	50	20	35	60	WFB.316.160WN
WFB32-20	18	50	20	50	44	WFB.318.144
WFB32-20	18	50	20	35	60	WFB.318.160
WFB32-20	20	50	20	50	47	WFB.320.147
WFB32-20	20	50	20	39	60	WFB.320.160
WFB32-20	25	50	20	47	60	WFB.325.160

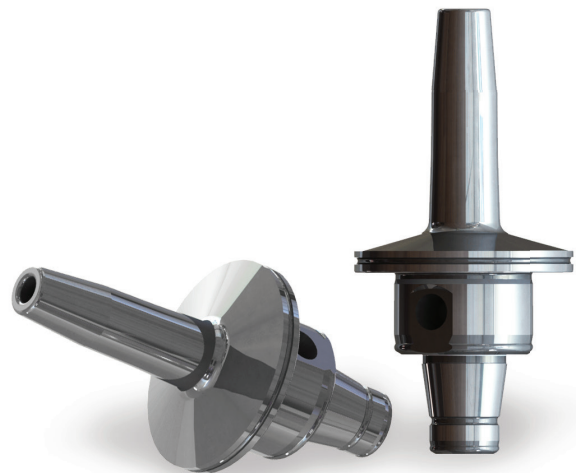
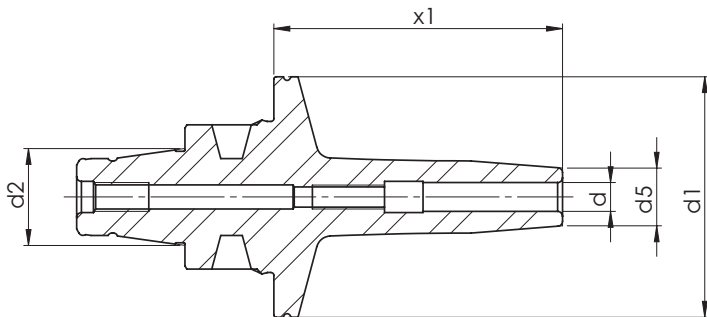
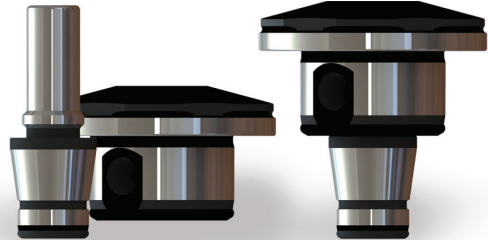
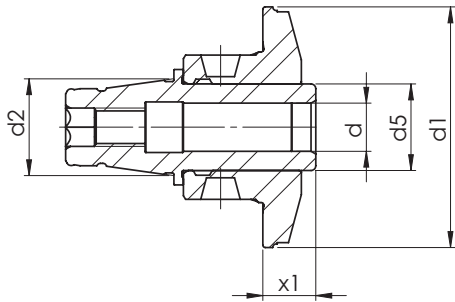
**WF**  
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# WFB - Schrumpffutter

WFB - Shrink fit chucks  
WFB - Mandrins de frettage

WG 35



Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	3	30	12	10	37	WFB.203.037.SFR
WFB20-12	3	30	12	10	51	WFB.203.051.SFR
WFB20-12	3	30	12	9	17	WFB.S20.003.017.SF*
WFB20-12	3	29	12	9	17	WFB.S20.003.017.SFK*
WFB20-12	4	30	12	13	35	WFB.204.035.SFR
WFB20-12	4	30	12	12	50	WFB.204.050.SFR
WFB20-12	4	30	12	9	17	WFB.S20.004.017.SF*
WFB20-12	4	29	12	9	17	WFB.S20.004.017.SFK*
WFB20-12	6	30	12	13	32	WFB.206.032.SFR
WFB20-12	6	30	12	15	47	WFB.206.047.SFR
WFB20-12	6	30	12	14	17	WFB.S20.006.017.SF*
WFB20-12	6	30	12	14	27	WFB.S20.006.027.SF*
WFB20-12	6	29	12	14	27	WFB.S20.006.027.SFK*
WFB20-12	8	30	12	15	30	WFB.208.030.SFR
WFB20-12	8	30	12	17	45	WFB.208.045.SFR

\* = Zweigeteilte Ausführung / Two split construction / Deux divisé construction

# WFB - Schrumpffutter

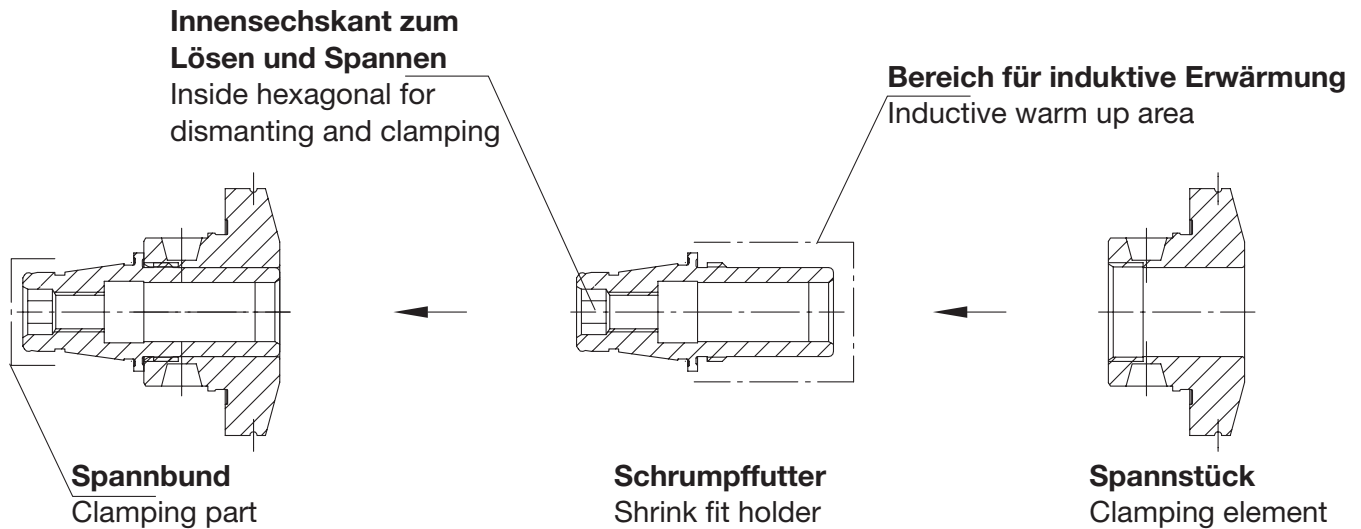
WFB - Shrink fit chucks  
WFB - Mandrins de frettage

WG 35



Size	[mm]	[mm]	[mm]	[mm]	[mm]	Order no.
Grandeur						N° de Code
Größe	d	d1	d2	d5	x1	Bestellnummer
WFB20-12	8	30	12	14	20	WFB.S20.008.020.SF*
WFB20-12	8	30	12	14	27	WFB.S20.008.027.SF*
WFB20-12	8	29	12	14	27	WFB.S20.008.027.SFK*
WFB20-12	10	30	12	16	27	WFB.S20.010.027.SF*
WFB20-12	12	30	12	18	35	WFB.2HO.D12.SFR
WFB24-16	3	40	16	13	34	WFB.243.034.SFR
WFB24-16	4	40	16	13	34	WFB.244.034.SFR
WFB24-16	6	40	16	13	30	WFB.246.030.SFR
WFB24-16	8	40	16	14	30	WFB.248.030.SFR
WFB24-16	10	40	16	17	30	WFB.241.030.SFR
WFB32-20	3	50	20	13	37	WFB.303.037SFR
WFB32-20	3	50	20	10	60	WFB.303.060SFR
WFB32-20	3	50	20	-	11	WFB.S32.003.011.SF*
WFB32-20	3	50	20	13	37	WFB.S32.003.037.SF*
WFB32-20	4	50	20	13	35	WFB.304.035.SFR
WFB32-20	4	50	20	12	60	WFB.304.060SFR
WFB32-20	4	50	20	-	11	WFB.S32.004.011.SF*
WFB32-20	5	50	20	13	60	WFB.305.060SFR
WFB32-20	5	50	20	-	11	WFB.S32.005.011.SF*
WFB32-20	6	50	20	13	32	WFB.306.032.SFR
WFB32-20	6	50	20	15	60	WFB.306.060SFR
WFB32-20	6	50	20	-	11	WFB.S32.006.011.SF*
WFB32-20	6	50	20	13	32	WFB.S32.006.032.SF*
WFB32-20	8	50	20	15	30	WFB.308.030.SFR
WFB32-20	8	50	20	17	60	WFB.308.060SFR
WFB32-20	8	50	20	-	11	WFB.S32.008.011.SF*
WFB32-20	8	50	20	15	30	WFB.S32.008.030.SF*
WFB32-20	10	50	20	22	60	WFB.310.060SFR
WFB32-20	10	50	20	18	11	WFB.S32.010.011.SF*
WFB32-20	10	50	20	18	25	WFB.S32.010.025.SF*
WFB32-20	12	50	20	26	60	WFB.312.030.SFR
WFB32-20	12	50	20	25	60	WFB.312.060SFR
WFB32-20	12	50	20	18	11	WFB.S32.012.011.SF*
WFB32-20	12	50	20	18	11	WFB.S32.012.011.SF*
WFB32-20	12	50	20	18	30	WFB.S32.012.030.SF*
WFB32-20	14	50	20	30	60	WFB.314.060.SFR
WFB32-20	14	50	20	27	25	WFB.S32.014.025.SF*
WFB32-20	16	50	20	30	60	WFB.316.060SFR
WFB32-20	16	50	20	27	25	WFB.S32.016.025.SF*
WFB32-20	16	50	20	27	32	WFB.S32.016.032.SF*

\* = Zweigeteilte Ausführung / Two split construction / Deux divisé construction



**Funktionsweise:**  
 Mode of operation:

**1. WFB Schrumpfadapter demontieren. Zum Lösen und Spannen darf nur der im Schrumpffutter eingebrachte Sechskant genutzt werden.**

WFB shrink fit chucks disassemble. Please use the inside hexagonal for dismantling and clamping.

**2. Schrumpfadapter am Spannbund in Grundaufnahme (Spannzangenfutter) aufnehmen.**

Put the shrink adapter with clamping sight in the collet chuck from the machine.

**3. Induktiv erwärmen und Schneidwerkzeug einschrumpfen.**

Inductive heat up and shrinking cutting tools.

**4. Schrumpffutter abkühlen lassen.**

Let cool down the shrink adapter.

**5. Spannstück und Schrumpffutter zusammen montieren.**

Clamping element and shrink fit holder must be mounting together.

**Wichtiger Hinweis:**  
 Important information:

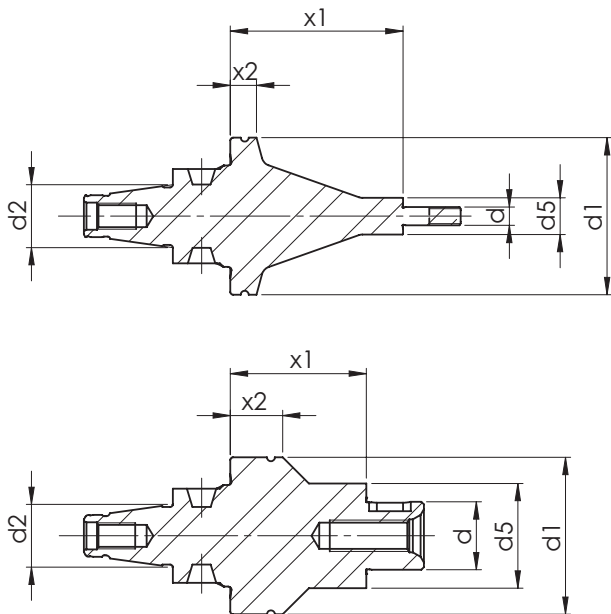
**WFB Schrumpffutter in kurzer Ausführung bestehen aus dem eigentlichen Schrumpffutter und dem Spannstück. Beide Teile werden in zusammengebauten Zustand ausgeliefert und sind mit der gleichen Kennung beschriftet. Achtung! Nur Teile mit gleicher Kennung dürfen als Adapter montiert werden.**

WFB shrink fit holder in short construction consists of shrink fit holder and clamping element. Both element will be delivered in assembled condition and they are marked with the same identification. Attention! Only parts with the same identification may be assembled as adapter.

# WFB - Sägeblattaufnahmen

WFB - Tool holders for saw blade  
WFB - Mandrins pour lame de scie

WG 35



## Lieferumfang:

Bei Ø 3,5 mm inkl. 1 St. M3,5x0,6-Mutter,  
je 1 St. Fräsdornring 3,5x6,5x1 - 3,5x6,5x2 mm.

Bei Ø 5 mm inkl. 1 St. M5-Mutter,  
1 St. Fräsdornring 5x9x1 mm, 2 St. Fräsdornringe 5x9x2 mm.

Bei Ø 8 mm inkl. 1 St. M8x1-Mutter, 1 St. Passfeder 2x2x6 mm,  
je 1 St. Fräsdornring 8x14x1 - 8x14x3 - 8x14x4 mm.

Bei Ø 10 mm inkl. 1 St. M10x1-Mutter, 1 St. Passfeder 3x3x7 mm,  
je 1 St. Fräsdornring 10x16x0,5 - 10x16x1 - 10x16x3 - 10x16x5 mm.

Bei Ø 13 mm inkl. 1 St. Fräseranzugsschraube, 1 St. Passfeder 4x4x8 mm,  
je 1 St. Fräsdornring 13x21x0,5 - 13x22x1 - 13x22x3 - 13x22x5 mm.

Bei Ø 16 mm inkl. 1 St. Fräseranzugsschraube, 1 St. Passfeder 4x4x10 mm,  
je 1 St. Fräsdornring 16x25x1 - 16x27x2 - 16x27x3 - 16x27x10 mm.

Bei Ø 22 mm inkl. 1 St. Fräseranzugsschraube, 1 St. Passfeder 6x6x14 mm,  
je 1 St. Fräsdornring 22x33x1 - 22x34x2 - 22x34x6 - 22x34x10 mm.

Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	[mm] <b>x2</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	3,5	30	12	7	33	5	WFB.035A.2033
WFB20-12	5	30	12	10	33	5	WFB.05A.2033
WFB20-12	8	30	12	15	26	10	WFB.08A.2026
WFB20-12	10	30	12	17	26	10	WFB.10A.2026
WFB20-12	13	30	12	20	26	10	WFB.13A.2026
WFB20-12	16	30	12	24	26	10	WFB.16A.2026
WFB32-20	22	30	20	34	26	10	WFB.22A.2026

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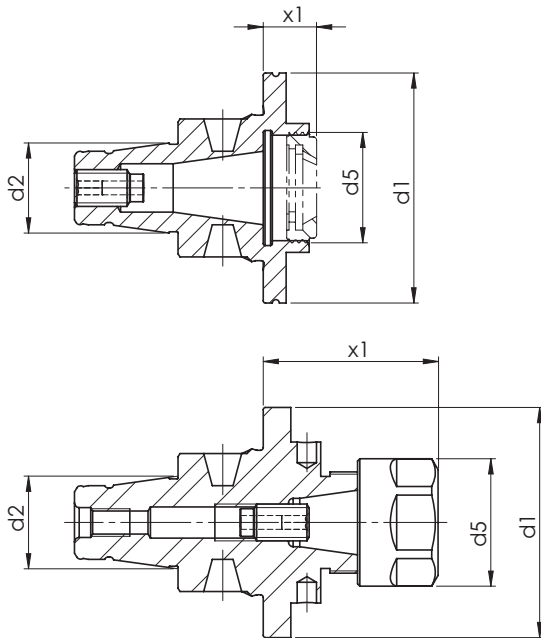
ph HORN ph

# WFB - Spannzangenfutter 8° Typ ER

WFB - Collet chucks 8° type ER

WFB - Mandrins porte-pinces 8° type ER

WG 35

**Verwendung:** Zur Aufnahme von Werkzeugen mit Zylinderschaft in Spannzangen DIN 6499.**Lieferumfang:** Fräsespannfutter mit Spannmutter und Anschlagschraube.**Spannzangen:** Siehe Seite 11.35**Application:** To hold tools with parallel shank in collets DIN 6499**Scope of supply:** Collet chucks with collet nut and adjusting screw.**Collets:** See page 11.35**Application:** Pour montage d'outils à queue cylindrique en pinces DIN 6499.**Livraison:** Mandrins à pinces, écrous de serrage, vis de réglage. **Pinces:** Voir page 11.35

Size Grandeur Größe	Type Type Typ	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	ER8 M	30	12	12	25	WFB.208.025MINI
WFB20-12	ER8 M	30	12	12	57	WFB.208.057MINI
WFB20-12	ER11	30	12	16	25	WFB.211.025MINI
WFB20-12	ER11 A	29	12	18	10	WFB.211.A10K
WFB20-12	ER11 A	30	12	18	10	WFB.211.A10T
WFB20-12	ER11	29	12	19	25	WFB.211.025K
WFB20-12	ER11	30	12	19	25	WFB.211.025T
WFB20-12	ER11	30	12	19	45	WFB.211.045T
WFB20-12	ER16 M	30	12	22	28	WFB.216.028MINI
WFB20-12	ER16	29	12	28	28	WFB.216.028K
WFB20-12	ER16	30	12	28	28	WFB.216.028T
WFB20-12	ER16	30	12	28	43	WFB.216.043T
WFB20-12	ER20 M	30	12	28	36	WFB.220.036MINI
WFB20-12	ER20 M	30	12	28	41	WFB.220.041MINI

**A\*** = Innenliegende Spannmutter / Internal collet nut / Ecrous de serrage du dedans**M\*** = Mini Spannmutter / Mini-collet nut / Mini-écrous de serrage



# WFB - Spannzangenfutter 8° Typ ER

WFB - Collet chucks 8° type ER  
WFB - Mandrins porte-pinces 8° type ER

WG 35



Size Grandeur Größe	Type Type Typ	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	ER20 M	30	12	28	46	WFB.220.046MINI
WFB20-12	ER20 M	30	12	28	56	WFB.220.056MINI
WFB20-12	ER20	29	12	34	36	WFB.220.036K
WFB20-12	ER25 M	30	12	35	43	WFB.225.043MINI
WFB20-12	ER25	30	12	42	43	WFB.225.043
WFB24-16	ER11 M	40	16	16	42	WFB.211.042MINI
WFB24-16	ER11	40	16	19	6	WFB.211.006
WFB24-16	ER11	40	16	19	21	WFB.211.021
WFB24-16	ER16 A	40	16	24	16	WFB.216.A16
WFB24-16	ER16	40	16	28	30	WFB.216.030
WFB24-16	ER20 A	40	16	28	30	WFB.220.A30
WFB32-20	ER11 M	50	20	16	67	WFB.311.067MINI
WFB32-20	ER11	50	20	19	24	WFB.311.025T
WFB32-20	ER16 A	50	20	24	10	WFB.316.A10T
WFB32-20	ER16 A	50	20	24	16	WFB.316.A16
WFB32-20	ER16	50	20	28	36	WFB.316.038
WFB32-20	ER16	50	20	28	160	WFB.316.160
WFB32-20	ER20 A	50	20	28	16	WFB.320.A16
WFB32-20	ER25 A	50	20	32	36	WFB.325.A36
WFB32-20	ER25	50	20	42	28	WFB.325.028
WFB32-20	ER25	50	20	42	40	WFB.325.040
WFB32-20	ER32	50	20	50	42	WFB.332.042

**A\*** = Innenliegende Spannmutter / Internal collet nut / Ecrous de serrage du dedans

**M\*** = Mini Spannmutter / Mini-collet nut / Mini-ecrous de serrage

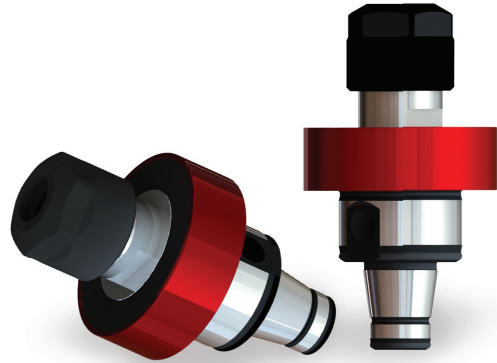
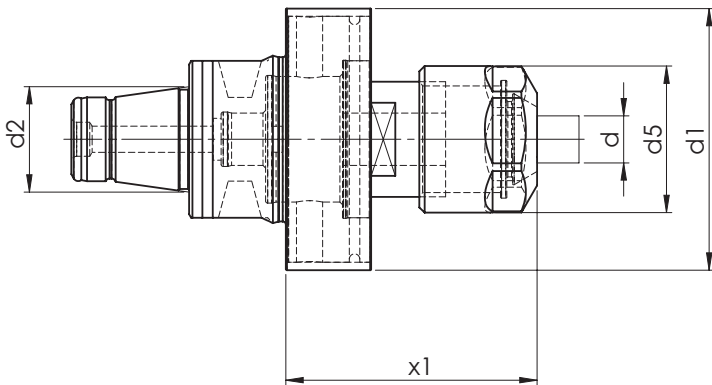
# W&F

ph HORN ph

## WFB - Softsynchro® mit IKZ

WFB - Softsynchro® with internal cooling system  
WFB - Softsynchro® avec arrosage central

WG 35



Gewindebohrer DIN374 / DIN376	Gewindebohrer DIN371	Schaft Ø D (mm)	Einstecktiefe E (mm)	Zangen- type
M6	M4	4,5	29	ER-GB
M8	M4,5 - M6	6	31	ER-GB
M10	M7	7	31	ER-GB
-	M8	8	36	ER-GB
M12	-	9	48	ER
-	M10	10	43	ER

### Technische Details

Technical specifications

**Spannbereich:** Ø 4,5 - 10,0 mm für Gewindebohrer M4 - M12.  
Range of clamping: Ø 4,5 - 10,0 mm for screw tap M4 - M12.

**Längenausgleich auf Druck/Zug:** 0,5 mm.  
Length compensation on pressure and tension.

**Kühlmitteldruck:** max. 70 Bar.  
Coolant pressure: max. 70 bar.

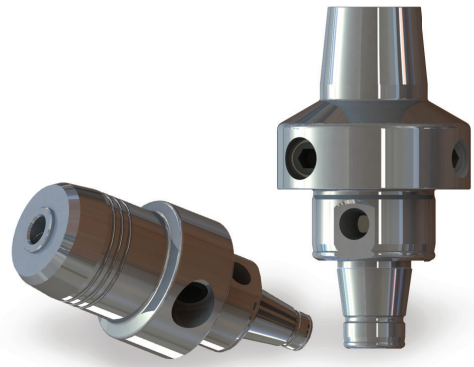
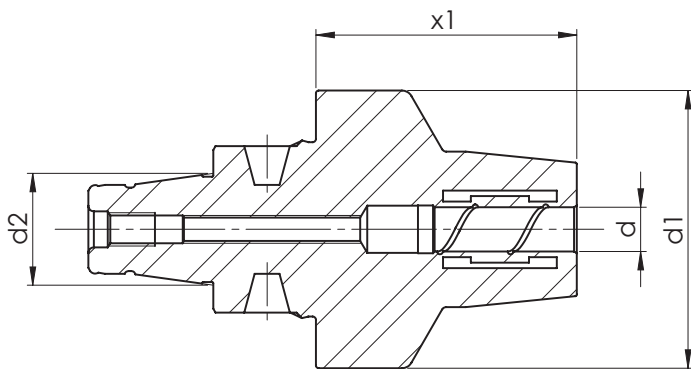
**Kühlmittelzufuhr durch das Zentrum.**  
Coolant supply through the middle.

Size Grandeur Größe	Type Type Typ	[mm]	[mm]	[mm]	[mm]	Order no. N° de Code Bestellnummer
		d1	d2	d5	x1	
WFB20-12	ER11	30	12	16	32,5	WFB.G20.M8
WFB24-16	ER11	40	16	16	30,5	WFB.G24.M8
WFB32-20	ER16	50	20	28	48	WFB.G32.M12
WFB32-20	ER32	50	20	34	48	WFB.G32.M20

# WFB - Hydro-Dehnspannfutter

WFB - Hydraulic expansion chuck  
WFB - Mandrin hydraulique

WG 35



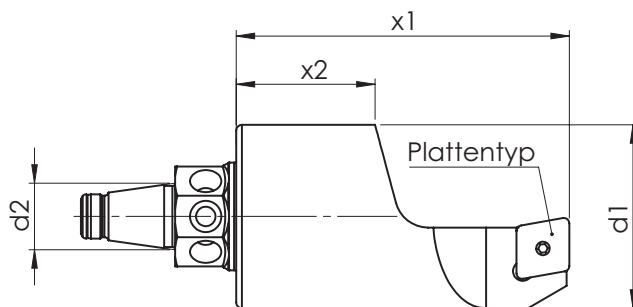
Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	6	30	12	39	WFB.206.039HDST
WFB20-12	8	30	12	39	WFB.208.039HDST
WFB20-12	10	30	12	39	WFB.210.039HDST
WFB32-20	6	50	20	24	WFB.306.024HDST
WFB32-20	8	50	20	24	WFB.308.024HDST
WFB32-20	10	50	20	29	WFB.310.029HDST
WFB32-20	12	50	20	34	WFB.312.034HDST
WFB32-20	14	50	20	34	WFB.314.034.HDST
WFB32-20	16	50	20	42	WFB.316.042.HDST

**WF**  
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# WFB-Drehhalter W-T mit IKZ

WFB - Turning tool holder W-T with internal cooling system  
WFB - Rotatif porte-outil W-T avec arrosage central

**WG 35**

Type	Form
------	------

C09	
D11	
V11	

Size Grandeur Größe	Type Type Typ	[mm]	[mm]	[mm]	[mm]	Order no. N° de Code Bestellnummer
		d1	d2	x1	x2	
WFB20-12	C09	33	12	60	25	WFB.2DH.C09/L
WFB20-12	C09	33	12	60	25	WFB.2DH.C09/R
WFB20-12	D11	33	12	60	25	WFB.2DH.D11/L
WFB20-12	D11	33	12	60	25	WFB.2DH.D11/R
WFB20-12	V11	33	12	60	25	WFB.2DH.V11/L
WFB20-12	V11	33	12	35	10	WFB.2DH.V11.R.X=35
WFB20-12	V11	33	12	60	25	WFB.2DH.V11/R
WFB32-20	C09	50	20	80	25	WFB.3DH.C09/R
WFB32-20	D11	50	20	80	25	WFB.3DH.D11/R
WFB32-20	V11	50	20	80	25	WFB.3DH.V11/R

**Lieferung erfolgt ohne Schneidwerkzeuge**

Delivery without cutting tools / Livraison sans outils de coupe

# WFB-Klemmhalter W-T HORN Mini mit IKZ

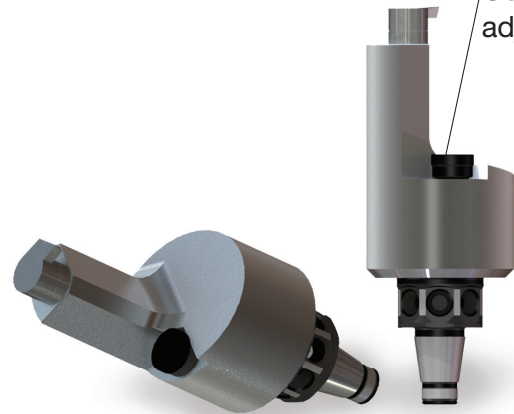
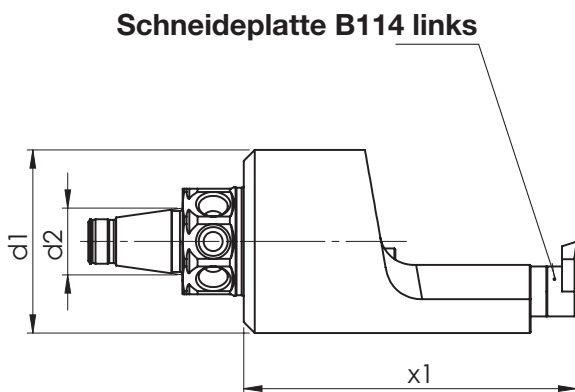
WFB - Toolholder W-T HORN Mini with internal cooling system  
WFB - Porte-outil W-T HORN Mini avec arrosage central

WG 35



Kühlmitteldüse  
verstellbar

Coolant nozzle  
adjustable



Size Grandeur Größe	Type Type Typ	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	114	33	12	60	WFB.2HO.114
WFB32-20	114	50	20	80	WFB.3HO.114

**Lieferung erfolgt ohne Schneidwerkzeuge**

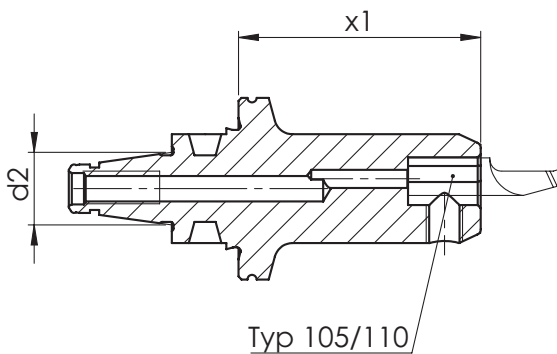
Delivery without cutting tools / Livraison sans outils de coupe

**WF**  
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# WFB-Klemmhalter W-T HORN Supermini® mit IKZ

WFB - Toolholder W-T HORN Supermini® with internal cooling system  
WFB - Porte-outil W-T HORN Supermini® avec arrosage central

**WG 35**

Size Grandeur Größe	Type Type Typ	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	105	18	12	40	WFB.2HO.105
WFB20-12	105	18	12	55	WFB.2HO.105.055
WFB20-12	110	20	12	40	WFB.2HO.110
WFB32-20	105	50	20	40	WFB.3HO.105
WFB32-20	105	50	20	55	WFB.3HO.105.055
WFB32-20	110	50	20	40	WFB.3HO.110

**Lieferung erfolgt ohne Schneidwerkzeuge**

Delivery without cutting tools / Livraison sans outils de coupe

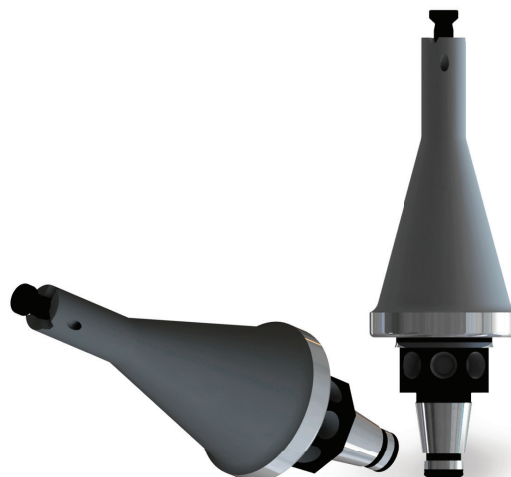
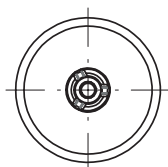
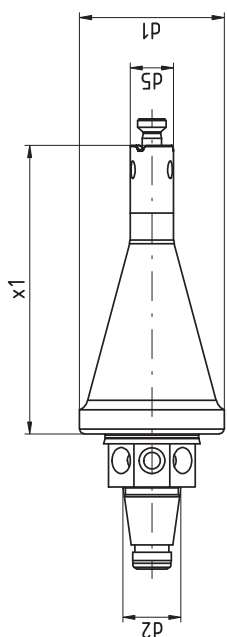
# WFB - HORN Fräuserschaft mit IKZ

WFB - HORN milling shank with internal cooling  
 WFB - HORN arbre de coupe avec arrosage central

WG 35

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Size Grandeur Größe	Type Type Typ	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d5</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	311/611	30	12	9	60	WFB.2HO.M311.060
WFB20-12	313/613	30	12	13,3	60	WFB.2HO.M313.060

**WF**  
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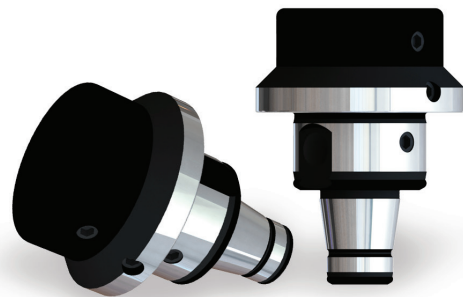
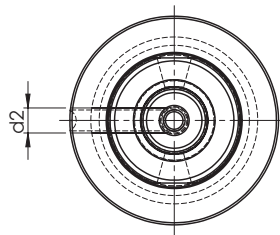
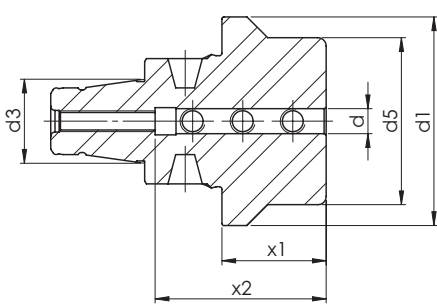
ph HORN ph

# WFB-Bohrstangenhalter

WFB - Boring bar holder

WFB - Porte-outil pour barres d'alésage

WG 35



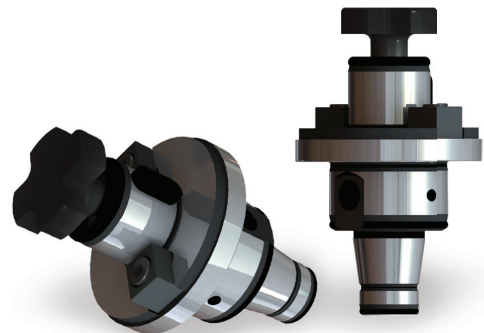
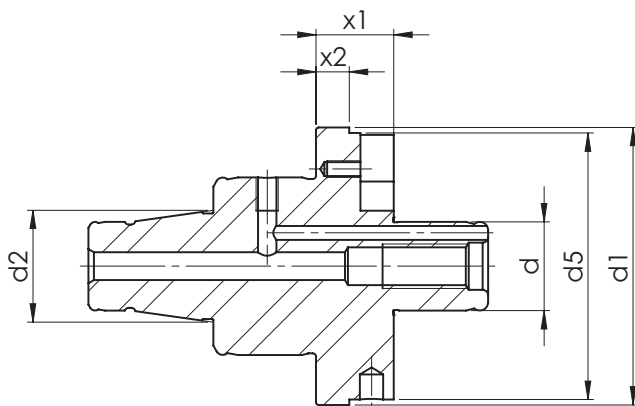
Size Grandeur Größe	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	Order no. N° de Code Bestellnummer
	d	d1	d2	d3	d5	x1	x2	
WFB20-12	3	30	M3	12	18	40	15	WFB.2E0.003
WFB20-12	4	30	M4	12	18	40	15	WFB.2E0.004
WFB20-12	5	30	M5	12	18	40	41	WFB.2E0.005
WFB20-12	6	30	M6	12	18	40	41	WFB.2E0.006
WFB20-12	8	30	M6	12	22	40	41	WFB.2E0.008
WFB20-12	10	30	M6	12	22	40	41	WFB.2E0.010
WFB20-12	12	30	M8	12	30	40	35	WFB.2E0.012
WFB20-12	16	30	M8	12	30	40	35	WFB.2E0.016
WFB20-12	20	30	M8	12	33	40	35	WFB.2E0.020
WFB20-12	1/4"	30	M6	12	18	40	30	WFB.2E0.1/4
WFB20-12	1/8"	30	M3	12	18	40	25	WFB.2E0.1/8
WFB20-12	3/16"	30	M4	12	18	40	25	WFB.2E0.3/16
WFB20-12	3/4"	30	M8	12	33	40	35	WFB.2E0.019
WFB32-20	6	50	M6	20	40	25	41	WFB.3E2.006
WFB32-20	8	50	M6	20	40	25	41	WFB.3E2.008
WFB32-20	10	50	M6	20	40	25	41	WFB.3E2.010
WFB32-20	12	50	M8x1	20	40	25	41	WFB.3E2.012
WFB32-20	16	50	M8x1	20	40	25	41	WFB.3E2.016
WFB32-20	20	50	M8x1	20	50	40	41	WFB.3E2.020
WFB32-20	25	50	M8x1	20	50	55	51	WFB.3E2.025



# WFB - Aufsteckfräserdorne mit IKZ

WFB - Milling machine arbors with internal cooling system  
 WFB - Mandrins porte-fraises avec arrosage central

WG 35



**Verwendung:** Zur Aufnahme von Fräsern mit Quernut

**Lieferumfang:** Mit eingebauten Mitnehmersteinen und Fräseranzugschraube

**Application:** For cutters with key drive

**Scope of supply:** With driver and cruciform screw

**Application:** Pour le montage de fraises avec rainures transversales

**Livraison:** Avec entraînement par tenons et vis de serrage

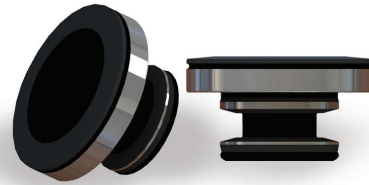
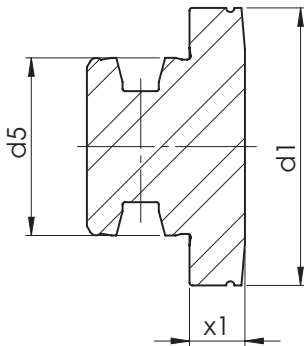
Size	[mm]	[mm]	[mm]	Smm]	[mm]	mm]	Order no.
Grandeur							N° de Code
Größe	d	d1	d2	d5	x1	x2	Bestellnummer
WFB24-16	16	40	16	30	14	5	WFB.16A.2414
WFB32-20	13	50	20	20	14	6	WFB.13A.3214
WFB32-20	16	50	20	40	14	6	WFB.16A.3214
WFB32-20	22	50	20	48	9	6	WFB.22A.3209T
WFB32-20	22	50	20	48	14	6	WFB.22A.3214
WFB32-20	27	50	20	55	14	6	WFB.27A.3214

**WF**  
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# WFB - Verschlussstopfen

WFB - Closing plug  
WFB - Bouchon d'étanchéité

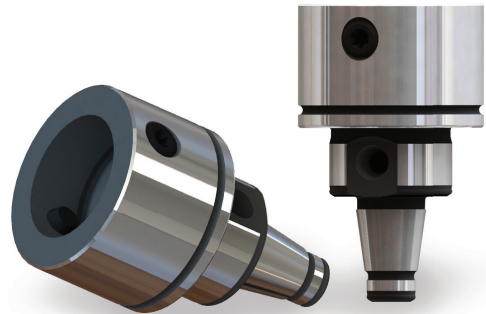
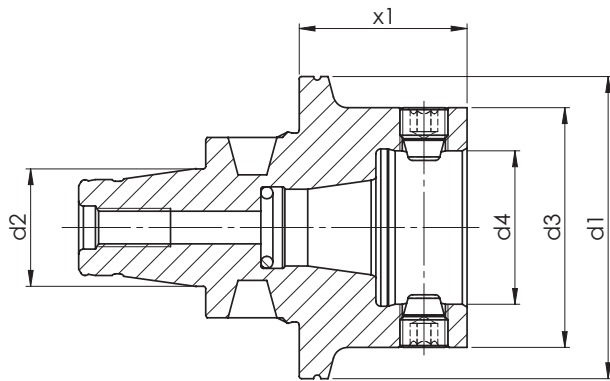
**WG 35**

Size Grandeur Größe	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	29	20	10	WFB.212.000K
WFB20-12	30	20	10	WFB.212.000
WFB24-16	40	24	10	WFB.241.200
WFB32-20	50	32	10	WFB.320.000

# WFB - Reduzierungen / Verlängerungen

WFB - Reductions / Extensions  
WFB - Réductions / Prolongations

WG 35



Size Grandeur Größe	[mm] <b>d1</b>	[mm] <b>d2</b>	[mm] <b>d3</b>	[mm] <b>d4</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	30	12	30	12	20	WFB.V20.020
WFB20-12	30	12	30	12	33,5	WFB.V20.033,5
WFB24-16	40	16	30	12	10	WFB.R24.B20
WFB32-20	50	20	30	12	15	WFB.R32.B20
WFB32-20	50	20	40	16	15	WFB.R32.B24
WFB32-20	63	25	40	25	30	WFB.R32.R40

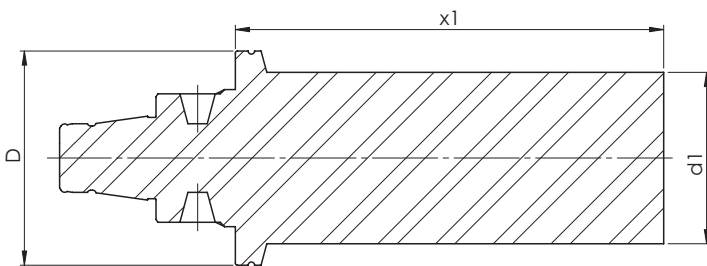
**WF**  
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# WFB - Kontrolldorne

WFB - Test arbors  
WFB - Mandrins de contrôle

WG 35



**Verwendung:** Zur Abnahme von Werkzeugmaschinen gemäß ISO-Empfehlung R230 oder zur Überprüfung der Werkzeugspindel

**Application:** For machine tools according to ISO recommendations R230 or for testing the tool spindle

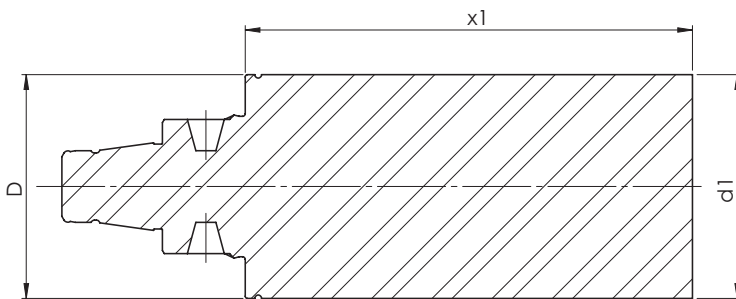
**Application:** Pour la recette technique des machines conforme recommandation ISO R230

Size Grandeur Größe	[mm] D	[mm] d1	[mm] x1	Order no. N° de Code Bestellnummer
WFB20-12	30	16	60	WFB.KD1.060
WFB20-12	29	16	60	WFB.KD1.060K
WFB24-16	40	20	80	WFB.KD2.080
WFB32-20	50	40	100	WFB.KD3.100

# WFB - Bohrstangen-Rohlinge

WFB - Boring bar-blanks  
WFB - Barres à l'état brut

WG 35



Size Grandeur Größe	[mm] <b>d</b>	[mm] <b>d1</b>	[mm] <b>x1</b>	Order no. N° de Code <b>Bestellnummer</b>
WFB20-12	30	33	60	WFB.R20.060
WFB20-12	30	33	60	WFB.R20.X6S*
WFB24-16	40	45	80	WFB.R24.045.080.SX*
WFB32-20	50	22	60	WFB.R32.022.060.SX*
WFB32-20	50	50	100	WFB.R32.050.100.SX*

\* Material: 31CrMoV9

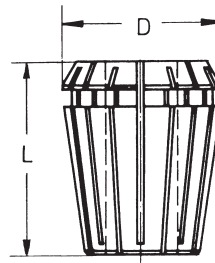


WG 35

# Spannzangen-Sätze mit Holzsockel System ER / ESX

Collets System ER / ESX in wooden board  
Pinces de serrage Système ER / ESX en socle de bois

WG 35

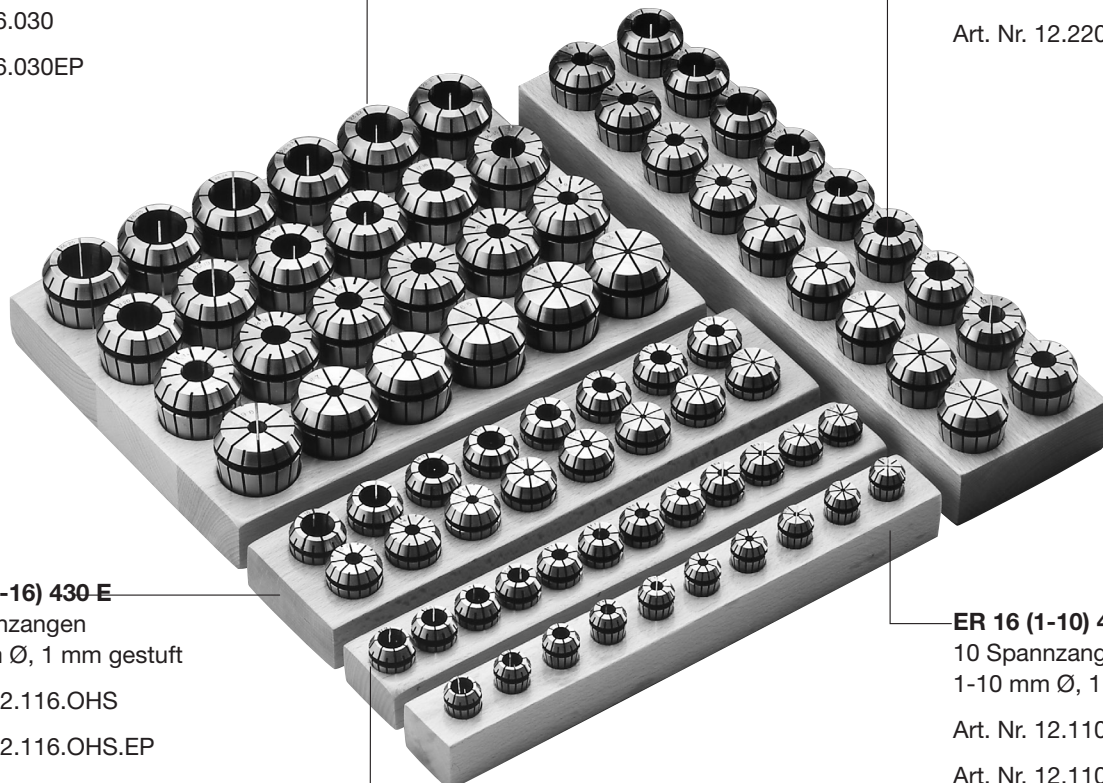


	D	L
426 E	17	27
428 E	21	31,5
430 E	26	34
470 E	33	40
472 E	41	46

**ER 40 (3-26) 472 E**  
23 Spannzangen  
4-26 mm Ø, 1 mm gestuft  
Art. Nr. 12.326.OHS  
Art. Nr. 12.326.OHS.EP

**zusätzlich** (wie Abbildung)  
gegen Mehrpreis  
1 Spannzange mit 3 mm Ø  
Art. Nr. 12.326.030  
Art. Nr. 12.326.030EP

**ER 32 (2-20) 470 E**  
18 Spannzangen  
3-20 mm Ø, 1 mm gestuft  
Art. Nr. 12.220.OHS  
Art. Nr. 12.220.OHS.EP



**ER 25 (2-16) 430 E**  
15 Spannzangen  
2-16 mm Ø, 1 mm gestuft  
Art. Nr. 12.116.OHS  
Art. Nr. 12.116.OHS.EP

**zusätzlich** (wie Abbildung)  
gegen Mehrpreis  
1 Spannzange mit 1 mm Ø  
Art. Nr. 12.116.010  
Art. Nr. 12.116.010EP

**ER 20 (2-13) 428 E**  
12 Spannzangen  
2-13 mm Ø, 1 mm gestuft  
Art. Nr. 12.113.OHS  
Art. Nr. 12.113.OHS.EP

**ER 16 (1-10) 426 E**  
10 Spannzangen  
1-10 mm Ø, 1 mm gestuft  
Art. Nr. 12.110.OHS  
Art. Nr. 12.110.OHS.EP

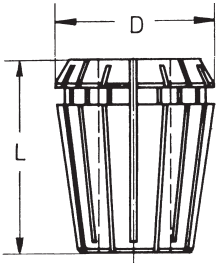
**WF**

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# Spannzangen System ER / ESX ER11 / ER16 / ER20

Collets System ER / ESX  
Pincas de serrage Système ER / ESX

**WG 11**

	D	L
424 E	11,5	18
426 E	17	27
428 E	21	31,5

Ø	Order no N° de Cde. Bestellnummer
<b>ER 11 (1 – 8) 424 E</b>	
1,0	12.107.010
1,5	12.107.015
2,0	12.107.020
2,5	12.107.025
3,0	12.107.030
3,5	12.107.035
4,0	12.107.040
4,5	12.107.045
5,0	12.107.050
5,5	12.107.055
6,0	12.107.060
6,5	12.107.065
7,0	12.107.070
8,0	12.107.080*

Ø	Order no N° de Cde. Bestellnummer
<b>ER 16 (1 – 12) 426 E</b>	
1,0	12.110.010
1,5	12.110.015
2,0	12.110.020
2,5	12.110.025
3,0	12.110.030
3,5	12.110.035
4,0	12.110.040
4,5	12.110.045
5,0	12.110.050
5,5	12.110.055
6,0	12.110.060
6,5	12.110.065
7,0	12.110.070
7,5	12.110.075
8,0	12.110.080
8,5	12.110.085
9,0	12.110.090
9,5	12.110.095
10,0	12.110.100
10,5	12.110.105*
11,0	12.110.110*
11,5	12.110.115*
12,0	12.110.120*

Ø	Order no N° de Cde. Bestellnummer
<b>ER 20 (1,0 – 15) 428 E</b>	
1,0	12.113.010*
2,0	12.113.020
3,0	12.113.030
4,0	12.113.040
5,0	12.113.050
6,0	12.113.060
7,0	12.113.070
8,0	12.113.080
9,0	12.113.090
10,0	12.113.100
11,0	12.113.110
12,0	12.113.120
13,0	12.113.130
13,5	12.113.135*
14,0	12.113.140*
14,5	12.113.145*
15,0	12.113.150*

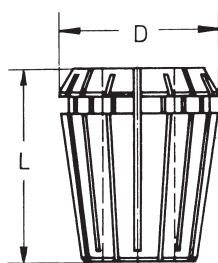
**\*Sondergröße**  
Special size  
Grandeur speciale



# Spannzangen System ER / ESX ER25 / ER32 / ER40

Collets System ER / ESX  
Pinces de serrage Système ER / ESX

WG 11



	D	L
430 E	26	34
470 E	33	40
472 E	41	46

Ø	Order no N° de Cde. Bestellnummer
<b>ER 25 (1 – 20) 430 E</b>	
1,0	12.116.010*
2,0	12.116.020
3,0	12.116.030
4,0	12.116.040
5,0	12.116.050
6,0	12.116.060
7,0	12.116.070
8,0	12.116.080
9,0	12.116.090
10,0	12.116.100
11,0	12.116.110
12,0	12.116.120
13,0	12.116.130
14,0	12.116.140
15,0	12.116.150
16,0	12.116.160
16,5	12.116.165*
17,0	12.116.170*
17,5	12.116.175*
18,0	12.116.180*
18,5	12.116.185*
19,0	12.116.190*
19,5	12.116.195*
20,0	12.116.200*

Ø	Order no N° de Cde. Bestellnummer
<b>ER 32 (2 – 22) 470 E</b>	
2,0	12.220.020*
3,0	12.220.030
4,0	12.220.040
5,0	12.220.050
6,0	12.220.060
7,0	12.220.070
8,0	12.220.080
9,0	12.220.090
10,0	12.220.100
11,0	12.220.110
12,0	12.220.120
13,0	12.220.130
14,0	12.220.140
15,0	12.220.150
16,0	12.220.160
17,0	12.220.170
18,0	12.220.180
19,0	12.220.190
20,0	12.220.200
21,0	12.220.210*
22,0	12.220.220*

Ø	Order no N° de Cde. Bestellnummer
<b>ER 40 (3 – 30) 472 E</b>	
3,0	12.326.030*
4,0	12.326.040
5,0	12.326.050
6,0	12.326.060
7,0	12.326.070
8,0	12.326.080
9,0	12.326.090
10,0	12.326.100
11,0	12.326.110
12,0	12.326.120
13,0	12.326.130
14,0	12.326.140
15,0	12.326.150
16,0	12.326.160
17,0	12.326.170
18,0	12.326.180
19,0	12.326.190
20,0	12.326.200
21,0	12.326.210
22,0	12.326.220
23,0	12.326.230
24,0	12.326.240
25,0	12.326.250
26,0	12.326.260
27,0	12.326.270*
28,0	12.326.280*
29,0	12.326.290*
30,0	12.326.300*

**\*Sondergröße**  
Special size  
Grandeur speciale



# WFB - Ersatzteile / Zubehör

WFB - Spare parts / Accessories  
 WFB - Pièces de rechange / Accessoires

WG 11



## WFB - Kegelgewindestifte

Threaded taper pins / Vis coniques filetées

For Size Pour Grandeur Für Größe	Order no N° de Cde. Bestellnummer
WFB20-12	WFS.M6x0,75.TORX 15 Plus
WFB20-12	WFS.M6x1.TORX
WFB24-16	WFS.M8x1.TORX
WFB32-20	WFS.M10x1x11



## Drehmoment-Schraubendreher auf Anfrage lieferbar!

Torque screwdriver on request available!

Tournevis dynamométrique disponible sur demande!

For Size Pour Grandeur Für Größe	Order no N° de Cde. Bestellnummer
WFB20-12	WFB.020.T15.PLUS



## Drehmomentset

Torque set

For Size Pour Grandeur Für Größe	Order no N° de Cde. Bestellnummer
WFB20-12/24-16	WF.88103001000





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